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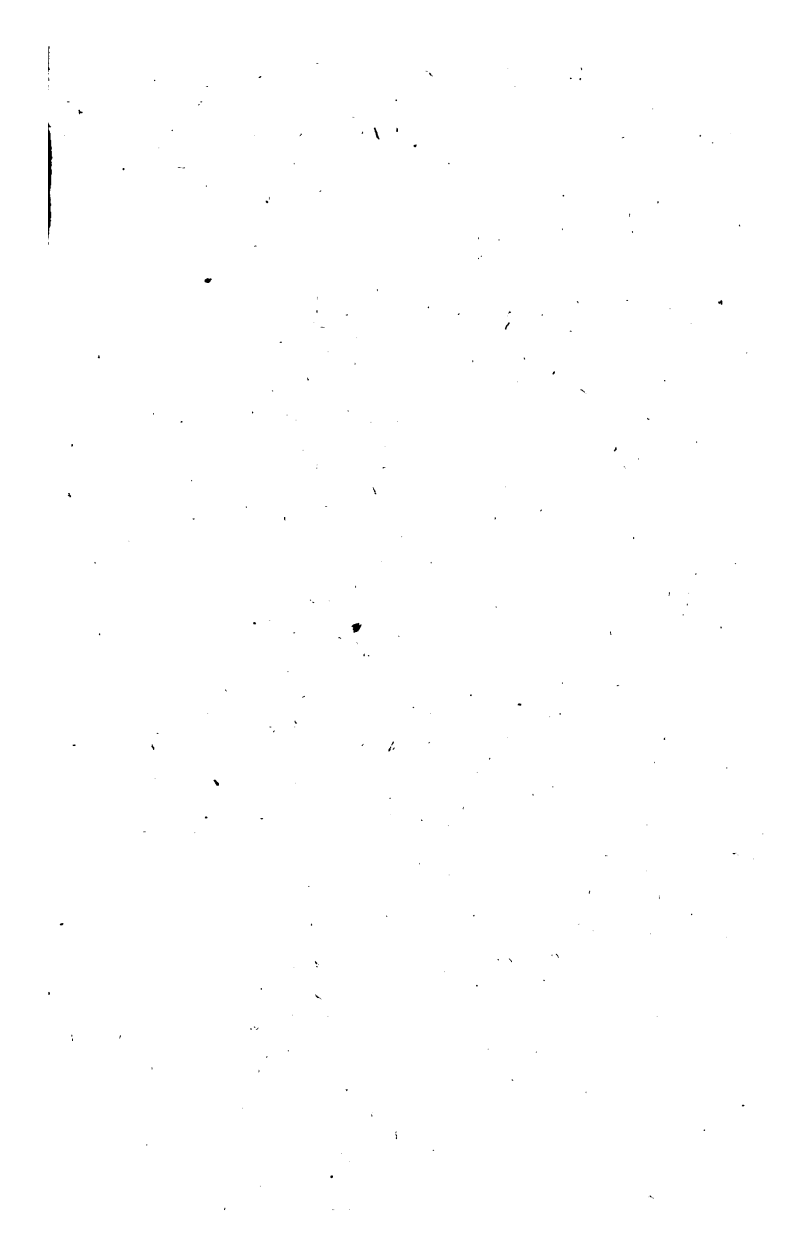
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BULLOUS SYPHILIDE (*Vide* page 121).

A MANUAL
OF THE
DISEASES OF THE SKIN.

133

BY
BALMANNO SQUIRE, M.B. LOND.

SURGEON TO THE BRITISH HOSPITAL FOR DISEASES OF
THE SKIN.

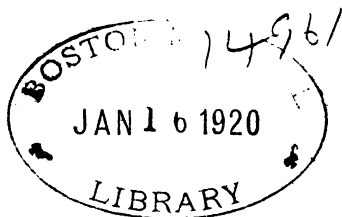
Fourth Smaller Edition.



LONDON:
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1887.

27 : 85



TO THE MEMORY
OF
PETER. SQUIRE,

THRICE PRESIDENT OF THE PHARMACEUTICAL SOCIETY OF GREAT BRITAIN,

This Work

IS AFFECTIONATELY DEDICATED

BY HIS SON.



PORT-WINE-MARK (*Vide* page 93).

PREFACE TO THE FOURTH EDITION.

IN writing this book my attempt has been to be concise and clear, rather than to be comprehensive.

I have aimed at conciseness by the elimination of superfluous words, and by passing over all controversies.

My efforts to be clear have been directed to the plan of the book, as well as to the style in which I have sought to express myself.

As to the plan of the book, its general arrangement is based on the simple classification of Willan; while in my accounts of the several diseases I have followed a uniform plan throughout.

The style in which the book is written may seem somewhat disjointed and abrupt—more suited to a work on Descriptive Botany than to one on Medicine—but I have in my “Introduction” ventured on a parallel between my subject and Botany; and I would here submit that the efflorescences of the skin demand, in the interests

of clearness, very much the same style of writing for their description as do the flowers of the field.

I have omitted from the book all mention of diseases that are foreign to this country, as well as of several rare conditions that are devoid of vital interest for the general practitioner.

I have also left out of account the eruptive fevers, the sores produced by cancer—in short, all such lesions of the skin as commonly find a place in systematic treatises either on medicine or on surgery.

The work professes to be no more than a concise introduction to the study of the diseases of the skin.

BALMANNO SQUIRE.

24, WEYMOUTH STREET, PORTLAND PLACE,
January 1887.







LUPUS (*Vide* page 78).

CONTENTS.



	PAGE
INTRODUCTION.	
CLASSIFICATION	1
CHAPTER I.	
EXANTHEMATA	5
CHAPTER II.	
SQUAMÆ	19
CHAPTER III.	
PAPULÆ	32
CHAPTER IV.	
VESICULÆ	47
CHAPTER V.	
PUSTULÆ	63
CHAPTER VI.	
BULLÆ	71
CHAPTER VII.	
TUBERCULA	78

CHAPTER VIII.

	PAGE
MACULÆ	92

CHAPTER IX.

SYPHILIDA	104
-------------------	-----

CHAPTER X.

SEBACEOUS DISEASES	136
----------------------------	-----

CHAPTER XI.

ANIMAL-PARASITE DISEASES	151
----------------------------------	-----

CHAPTER XII.

VEGETABLE-PARASITE DISEASES	165
-------------------------------------	-----

INDEX	191
---------------	-----

A MANUAL OF THE DISEASES OF THE SKIN.

INTRODUCTION.

CLASSIFICATION.

AT the beginning of the present century the diseases of the skin were classified by Willan, who arranged them in eight groups.

Since then, the science of cutaneous medicine has advanced very considerably, and many fresh systems of classification have, from time to time, been put forward as improvements on the system of Willan; but his classification is still the favourite one with practitioners in this country, and the nomenclature employed by him is that which is still used by those who wish to make themselves generally understood, when speaking in our language of any disease of the skin.

The reasons of this are not far to seek.

The classification of Willan (who may be regarded as the Linnæus of cutaneous disease) commends itself by its great simplicity; it is easily comprehended and easily remembered.

It has indeed the disadvantage of being an arbitrary, not a natural system; but this reproach attaches, in a greater or less degree, to every other arrangement of the diseases of the skin that has since been devised.

The knowledge of the subject remains still so far incomplete as to be insufficient for the foundation of a natural system, and the easy, intelligible, and long-known arrangement of Willan is consequently preferred to any of the less

familiar, more complicated, and by no means perfect substitutes for it, that the gradual advancement of science and the zeal of its cultivators have produced in such perplexing profusion.

When Willan's classification was first proposed, very little was known as to the *nature* of cutaneous diseases, and the great success of his system was owing to its excellent adaptation to the state of knowledge at the time it was brought out.

Since then, several fresh rays of light have penetrated the region of cutaneous medicine; for example, the Syphilides have been collected from out of the various classes of Willan's system, and arranged in a group by themselves. The vegetable-parasite group has been extracted in the same way, and our knowledge of the animal-parasite group is becoming much more developed. But, for the great majority of cutaneous diseases, we are able to propose no better a system of arrangement than that of Willan, because, in truth, our knowledge of them is not sufficiently superior to his to enable us to do so.*

Willan arranged the diseases affecting the skin in eight classes, as follows:—

EXANTHEMATA (*Rashes*).—Superficial red patches of various shape and size, which disappear under pressure and terminate in desquamation.

SQUAMÆ (*Scales*).—Laminæ of morbid cuticle, hard, thickened, whitish, and opaque, covering either skin of the natural colour or reddish slightly-raised patches.

* Hebra of Vienna, whose classification has for some time been in general vogue, is himself a tacit witness to the justice of my remark, inasmuch as under one of his twelve main classes, namely, under his No. 4 (Exudations), he includes the following somewhat comprehensive list:—Erythema, Roseola, Urticaria, Psoriasis, Pityriasis, Lichen, Prurigo, Eczema, Herpes, Ecthyma, Impetigo, Pemphigus, Rupia, Acne, and Scabies, as well as Measles, Scarlatina, Small-pox, Cow-pox, and Erysipelas, leaving the comparatively scanty remainder to be scattered over his remaining eleven classes, which, however, do not provide accommodation of any sort for the syphilitic eruptions.

PAPULÆ (*Pimples*).—Small *solid* acuminated elevations of the cuticle, commonly terminating in desquamation.

VESICULÆ (*Vesicles*).—Small hemispherical elevations of the cuticle, containing *lymph*, which, at first transparent and colourless, becomes often opalescent and milky.

PUSTULÆ (*Pustules*).—Small hemispherical elevations of the cuticle, containing *pus*; the elevations have often inflamed bases.

BULLÆ (*Blebs*).—Large portions of the cuticle detached from the skin by the interposition of a watery fluid, transparent or turbid.

TUBERCULA (*Tubercles*).—Small, hard, indolent, superficial tumours, either permanent or proceeding slowly to ulceration.

MACULÆ (*Spots*).—Permanent discoloration of some portion of the skin, often with a change of its structure; these stains may be white or dark coloured.

This arbitrary arrangement of Willan's may and should be retained for the classification of all diseases of the skin, the nature of which is not sufficiently known to enable them to be collected into *natural* groups; that is to say, it may be applied to the majority of cutaneous diseases.

There are four Natural Orders, however, which may be said to have been fairly rescued from the jurisdiction of Willan: these are,—

The **SYPHILIDES**.—Eruptions due to the introduction of the syphilitic virus into the system.

The **SEBACEOUS DISEASES** of the Skin.—Eruptions caused by disorder of the sebaceous follicles.

ANIMAL-PARASITE-DISEASES of the Skin. — Eruptions caused by the irritation set up by animal parasites.

And **VEGETABLE-PARASITE-DISEASES** of the Skin. — Eruptions caused by cryptogamous vegetable-growths.

The diseases of the skin may therefore be arranged in twelve classes, thus:—

EXANTHEMATA.

ERYTHEMA, ROSEOLA, URTICARIA.

INTRODUCTION.

SQUAMÆ.

PSORIASIS, PITYRIASIS, ICHTHYOSIS.

PAPULÆ.

LICHEN, STROPHULUS, PRURIGO.

VESICULÆ.

ECZEMA, HERPES.

PUSTULÆ.

ECTHYMA, IMPETIGO.

BULLÆ.

PEMPHIGUS, RUPIA.

TUBERCULA.

LUPUS, CHELOID, VERRUCA.

MACULÆ.

NÆVUS, LENTIGO, EPHELIS, VITILIGO.

SYPHILIDA.

VEGETATIVE, EXANTHEMATOUS, VESICULAR, SQUAMOUS,
PAPULAR, PUSTULAR, BULLOUS, AND TUBERCULAR SY-
PHILIDES.

SEBACEOUS DISEASES.

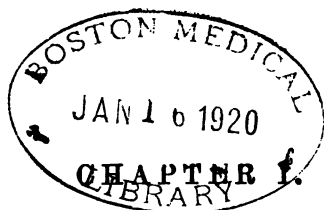
ACNE SIMPLEX, INDURATA, ROSACEA, HYPERTROPHICA
PUNCTATA, ALBIDA, OLEOSA, CEREÆ, CORNEA, AND -MOL-
LUSCUM.

ANIMAL-PARASITE-DISEASES.

SCABIES, PHTHIRIASIS.

VEGETABLE-PARASITE-DISEASES.

TINEA FAVOSA, TINEA TONSURANS, TINEA DECALVANS,
SYCOSIS, CHLOASMA.



EXANTHEMATA.

THE Exanthemata, or *Rashes*, appear as "superficial red patches of various shape and size, which can be made to disappear, for the moment, by pressure, and which terminate in desquamation." This definition, as we shall see, will not, if strictly applied, include all the eruptions which are classed under this heading.

The Exanthemata are Erythema, Roseola, and Urticaria.

Erythema appears as circumscribed patches of a red colour, occupying a limited portion of the skin.

In *Roseola*, there is a diffused mottling of the skin, which is spread over a considerable extent of surface; the variegated appearance being produced by small rose-coloured patches, which, running into one another, enclose islets of unaffected skin.

Whilst *Urticaria* is distinguished by solid, flat, elevated patches or *wheals*, which are of a dull white colour, and surrounded by a red blush.

SECTION I.—ERYTHEMA.

ERYTHEMA, which consists in an inflammatory redness of the skin, occurring in limited patches, is of two kinds, local and constitutional. It is attended with tingling, pricking, and smarting of the affected surface.

Its varieties are :—

LOCAL.	{	<i>E. simplex.</i>	Produced by the flow of irritating secretions (e.g., the urine) over the skin.		
		<i>E. intertrigo.</i>	The effect of confined perspiration between opposite surfaces of the skin.		
		<i>E. leve.</i>	Which is caused by cedema of the lower extremities.		
		<i>E. paratrimma,</i>	or the bedsore.		
		<i>E. pernio,</i>	or the chillblain.		
CONSTITUTIONAL.	{	DYS- PEPTIC.	RHEUMATIC.	<i>E. nodosum.</i>	Large red lumps occurring on the legs.
				<i>E. papulatum.</i>	Smaller elevated patches sprinkled over the face, neck, and arms.
				<i>E. circinatum.</i>	Annular raised patches, occurring on the trunk.
				<i>E. fugax.</i>	Transient, more or less diffused, redness of the face and hands.

LOCAL ERYTHEMA.

E. simplex is the result of local irritants of various kinds, such as a mustard poultice, an irritating plaister, or the friction of the dress producing a "chafe," but it is most commonly produced by irritating secretions flowing over the skin. Thus, it may be produced on the cheek by the discharge from the eyes in purulent ophthalmia, or in infants on the buttocks by neglect of cleanliness, or on the upper lip by the flow of acrid discharge from the nostrils during a cold, or in any situation by the discharge of pus from an ulcer or sinus.

When it affects the buttocks of infants, *E. simplex* is apt to be mistaken for infantile syphilis. But in the latter-disease the eruption is of a ham-coloured, tawny hue, and is often complicated with "mucous tubercles" around the anus, and an inelastic cracked appearance of the soles and

palms; it is accompanied, too, with snuffling at the nose, and a peculiar alteration of the infant's cry.

The *treatment* of Erythema simplex consists in the removal of the offending cause, and the use of some mildly astringent application, such as cold cream or weak lead lotion.

E. intertrigo occurs only where two opposing surfaces of the skin are in contact; for instance, between the toes, under the buttocks, in the armpits, or under the breasts. It is commoner in stout persons than in thin ones, and in women and infants than in men; in individuals of lymphatic temperament, it may be accompanied with copious thin matterly discharge (*E. purifluens*).

There is at first, merely redness of the crease or fold, but the reddened skin soon exudes a thin, ill-smelling discharge, which is usually serous, but is occasionally purulent.

In corpulent people, who are of uncleanly habits, Erythema intertrigo may pass into the chronic state, and superficial ulcers, with pale exuberant granulations, may take the place of the original rash.

The *treatment* of this variety of Erythema consists in separating the contiguous surfaces by keeping a piece of scorched rag between them, or in dusting them over with some soft impalpable powder, such as violet-powder, or lycopodium dust, which absorbs the irritating moisture; or the secretion may be constantly kept away by frequent washing of the surfaces, or may be checked by the use of astringent lotions. Painting the surfaces with tincture of iodine often has a very excellent effect.

E. leve is produced when the skin, stretched over an œdematous part, inflames. This variety of Erythema occurs, for the most part, in the legs; but when the patient is confined to bed, it may occur in other (dependent) situations.

It appears as smooth, shining, red spots, accompanied with increased swelling of the subjacent areolar tissue.

This variety of Erythema derives its importance from the tendency of the patches to terminate in gangrene of the

affected skin, and of the subjacent areolar tissue. When this is about to take place, the patches assume a purplish hue, and serous blebs are formed over them.

The *treatment* of *E. leve* consists in removing the cause (œdema) by diuretics, sudorifics, or aperients, by position, or by acupuncture; and in using stimulating applications, such as camphorated spirit or tincture of iodine, to the erythematous patches.

E. paratrimma, or the *Bedsore*, happens in the course of debilitating diseases that confine the patient long to bed, such as typhus or typhoid fever, or paralysis of the lower half of the body.

The common position of the bedsore is over the sacrum, but it is occasionally situated over either of the trochanters, or of the iliac crests.

It appears at first as a diffused dusky redness of a limited portion of the skin, attended with a sensation of pricking; sometimes serous blebs are developed on the reddened surface; soon, the affected skin becomes blackened, and a more or less extensive slough forms, which sometimes extends very deeply.

The *treatment* consists in the removal of pressure from the affected skin; in preventing the flow of irritating secretions over it; in a scrupulous attention to cleanliness; and in the local use of stimulating applications.

If a slough has formed, its separation should be favoured by the application of yeast poultices. After the separation of the slough, the ulcer should be dressed with some moderately stimulating ointment.

E. pernio (or the *Chillblain*) is a complaint almost peculiar to children and young persons; it affects especially those who are of lymphatic temperament.

Chillblains happen only during the prevalence of cold weather. In some individuals they appear regularly every winter, disappearing in the spring. They are situated generally on the backs of the toes and the fingers, but in adolescents they sometimes affect the nose.

They appear as shining, red, swollen patches, which are the seat of severe itching, and tingling, and are extremely sensitive even to the slightest pressure. These, after continuing for a few days, may gradually subside, leaving only a slight scurfiness of the affected skin.

But if they persist for many days, the reddened patches assume a bluish tint, and become surmounted by the watery blebs or "blains," from which the complaint derives its name.

These blebs become ruptured and ulceration takes place, and so a foul-looking wound, with ragged edges and a slough-like floor, is produced in the situation of the erythematous patch. This ulcer (commonly known as the broken chillblain) is sometimes pretty deep, and is always slow to heal.

In the *treatment* of chillblains, measures must be adopted to increase the activity of the general circulation by a generous and stimulating diet, active exercise, frictions of the skin with hair-gloves, etc.; and, at the same time, activity of the circulation in the affected part should be specially promoted by the use of stimulating applications, such as soap-liniment or camphor-cerate. If the chillblain be "broken," resin-ointment will be a suitable dressing; poultices are to be avoided, if possible.

RHEUMATIC ERYTHEMA.

E. nodosum affects almost invariably the legs, attacking especially the fore-surface of the leg, but it occurs sometimes on the backs of the forearms and on the thighs.

It presents the appearance of red, elevated patches of an oval form; the long diameter of the patch is generally parallel with the axis of the limb. The patches vary from an inch to three inches in diameter. They are palpable swellings, but their margin is ill-defined. At first they are hard and tender to the touch, and are of a rose-red colour, but in a few days they soften and change to a violet colour; in a

few days more this fades into a yellow tint, and the elevation disappears.

Each patch lasts, on the average, a week; but the disease is generally, by a succession of patches, prolonged for two or three weeks.

The appearance of the eruption is usually preceded for a few days by slight feverishness and rheumatic pains in the joints. These pains often continue with the eruption, and may even outlast it. They are sometimes very severe.

The complaint is commoner at the spring and fall than at other times of the year. It is almost peculiar to young people, especially those of lymphatic temperament. It attacks especially young girls, in whom it is often associated with amenorrhœa. It appears to be sometimes occasioned by fatigue, exposure to cold, and insufficient nourishment.

The *treatment* of Erythema nodosum should be commenced by a dose of aperient medicine; the patient should be put to bed or, at all events, directed to lie on a sofa most of the day. Quinine conjoined, if there be much anæmia, with iron, should be taken regularly in tolerably large doses; and, if there be any indication of a scrofulous taint, the addition of cod-liver oil will be of service.

E. papulatum differs from *E. nodosum* only in the much smaller size of its patches, which rarely exceed the size of a split pea, and in the situations occupied by it (the face, neck, breast, and arms). In every other respect its history is that of *E. nodosum*, and it demands the same treatment. It is of less common occurrence than *E. nodosum*.

Sometimes the spots are larger, from the size of a sixpence to that of a shilling, and proportionately elevated; they are then apt to occur also on the legs (*Erythema tuberculatum*). Such spots form a connecting link between this variety and the preceding one.

E. circinatum appears at first as small round patches slightly raised above the level of the surrounding skin. These gradually spread at their circumference, and at the same time fade at their centre, and so assume the form of

red embossed rings, the outer margin of the ring being abrupt and well defined, while the inner edge of the ring is gradually shaded off. The area enclosed by the ring is of a faded yellow colour. The breadth of the ring itself varies from a quarter to half an inch; generally, several rings are developed one after another; some of them may attain a diameter of several inches. After they have spread to a certain extent, portions of the rings are apt to fade, and the remaining portions, uniting with similar fragments of other rings, form with them variously-curved lines.

This variety of Erythema is confined generally to the trunk. It lasts about a week. It is not a common eruption. It sometimes occurs in the course of an attack of acute or subacute rheumatism. It requires the same treatment as *E. nodosum*.

DYSPEPTIC ERYTHEMA.

E. fugax is characterized by the sudden appearance of large red patches, usually on the face, but sometimes on other parts, namely, on the arms and upper part of the trunk. After remaining out for a few hours, they as suddenly disappear. In a day or two they reappear either in the same place or in a new one.

This eruption forms the connecting link between Erythema and Urticaria, and is by some writers included under the latter heading. It is generally brought on by some error of diet.

The *treatment* of it consists in remedying whatever disorder of the digestive organs may be the cause of its appearance.

SECTION II.—ROSEOLA.

ROSEOLA is a rash which presents the appearance of a diffused mottling of the skin, spread over a considerable

extent of surface; the mottling being produced by small rose-coloured patches, which, running into one another, enclose islets of unaffected skin. The rash, therefore, forms a sort of irregular network. It may commence on the chest, the belly, or the upper limbs, and may remain limited to either of those regions, or may spread all over the body.

The eruption of Roseola is preceded for a day or two by slight febrile disturbance, which subsides as the rash becomes developed, and there is commonly some dryness and redness of the fauces.

The duration of the rash is very brief. After persisting for three or four days, it fades away, leaving sometimes a slight scurfiness of the affected skin. Its colour is deepest on the second day.

It is of commoner occurrence in infants (*R. infantilis*) than in children or grown-up persons, being provoked often by the disorder of the alimentary canal that very frequently attends the first dentition.

In adults it is sometimes excited by the drinking freely of cold water after violent exertion.

It is more prevalent in the summer (*R. æstiva*) than in the winter, and seems to depend often on the disorder of the stomach and bowels so common at that season.

In infants, the patches are smaller and more closely arranged than in the adult.

The rash is sometimes produced by vaccination (*R. vaccinia*); appearing at the same time that the "red areola" forms around the vaccine vesicles, and spreading from the latter over a considerable extent of surface, sometimes even covering the whole of the body; its appearance increases the (usually) slight febrile disturbance that accompanies the formation of the "areola."

Sometimes Roseola occurs in the course of small-pox (*R. variolosa*). When this happens, the appearance of the proper small-pox eruption is delayed, the roseolous rash appearing at the time that the pustular small-pox eruption should, and, for two or three days, taking the place of it. This occur-

rence is more common in inoculated than in natural small-pox. The variolous roseola, like the ordinary eruption of small-pox, spreads from the face and chest to the extremities. It is sometimes so abundant that the affected surface looks almost uniformly red, and the case is then very apt to be mistaken for scarlatina. But the appearance of the pustular small-pox eruption very soon corrects an error of this kind.

Sometimes, but very rarely, Roseola assumes a chronic form, appearing and disappearing at uncertain intervals.

Roseola is so apt to be mistaken for measles as to have received the name of *false measles*. In either disease there is a diffused rash all over the body, interspersed with intervals of natural skin.

The rash of measles is, however, of a mulberry rather than of a rose colour; its reddened patches exhibit a crescentic shape. They appear first on the forehead: whereas Roseola may commence on other parts of the body, and when it begins on the face spreads from the neighbourhood of the nose.

There is more severe disturbance of the system. The feverishness precedes the eruption for three days (instead of only one). The eyes are swollen and watery in measles; and, lastly, measles is a contagious disease, which Roseola is not.

"Syphilitic roseola" may be distinguished from Roseola, properly so called, by the dusky and sombre hue of the rash, by the absence of itching, by the longer continuance of the rash, and by the more serious character of the throat-lesion when the throat is affected.

Treatment.—Roseola is a disease which, on account of its trivial character and its usually brief duration, does not require very active interference; indeed, it derives its chief importance from its liability to be confounded with other more serious complaints. A restricted and simple diet, gentle saline aperients, and a few warm baths, are, in most cases, all that is required.

If there be much acidity of the stomach, magnesia is indicated.

In infantile Roseola, if the gums are hot and tender, they should be lanced.

When the disease is chronic, the internal administration of dilute nitro-hydrochloric acid is of service, but sometimes a change of air and a course of sea-bathing are necessary.

SECTION III.—URTICARIA.

URTICARIA, or Nettle-rash, is characterized by evanescent cutaneous elevations called "pomphi" or "wheals," which may be described as circumscribed swellings of the skin, more or less hard, sometimes whiter, sometimes redder than the healthy skin, of brief duration, appearing and disappearing suddenly.

The disease may be either acute or chronic; in either case, the eruption presents the same essential characteristics.

Sometimes the wheals are few and far apart; sometimes so numerous and so closely arranged as to be confluent (*U. conferta*).

In some cases the wheals are extremely minute, not exceeding the size of a millet-seed ("*Lichen urticatus*"); in others, their area may equal that of a crown-piece. Their margin, which is always very distinct, may be either regularly rounded, or irregularly sinuous. Sometimes they occur in long bands (*U. gyrata*), and look like the marks of a whip. The surface of the wheals (excepting those of the smallest size) is flattened, and the larger ones often present a distinct depression at their centre.

The colour of the wheals is generally a dull white, but often a rosy red; in either case they are commonly surrounded by a rose-red areola, so that when the pomphi are near to one another, the areolæ of neighbouring pomphi join.

In situations where the subcutaneous areolar tissue is loose, the eruption may be accompanied with considerable subcutaneous swelling: this is apt to happen especially at the face and the scrotum.

Whether the disease be acute or chronic, the duration of an individual pomphus is always very brief, varying from a few minutes to, at the most, a few hours.

ACUTE URTICARIA is of two kinds, *U. febrilis* and *U. ab ingestis*.

Urticaria febrilis, or the Nettle-fever, begins with headache, feverishness, nausea, and pain at the epigastrium; the patient feels languid and depressed, and his tongue is furred; these symptoms, after they have persisted for two or three days, are terminated by the appearance of the rash, which is attended with much itching and tingling. The irritating sensations experienced by the patient provoke him to rub or scratch himself, and thereby greatly to increase the eruption. The attack lasts, on the average, about ten days. The rash is usually more developed, and the irritation occasioned by it more intense in the evening than at other times of the day. Whenever the rash subsides much, the precursory symptoms, already described, are apt to return.

Urticaria ab ingestis is a more acute disorder even than the Nettle-fever; it comes on more suddenly, lasts a much shorter time, and while it lasts, is a far more severe illness.

The eruption is developed within an hour or two after the ingestion of some offending substance; it is ushered in by epigastric pain, nausea, and faintness, and much heat and intolerable itching of the skin.

The rash is very confluent, and is accompanied with considerable subcutaneous swelling. The parts chiefly affected are the face, the neck, and the upper half of the body, but the eruption sometimes extends over the whole surface; occasionally, the mucous membrane of the mouth and pharynx is much swollen, and the patient sometimes suffers

from dyspnoea, so as to seem almost on the verge of suffocation. After a few hours' duration the violence of the attack subsides, and in a day or two the patient is well again.

If, as often happens, vomiting or diarrhoea occur during the course of the attack, great amelioration is at once produced. The most alarming symptom in an attack of this kind is the occurrence of extreme prostration.

CHRONIC URTICARIA is not attended with general disturbance of the system, nor is the rash so copious as in the acute kind.

Although the course of the disease may extend over a considerable space of time—several months or even several years—the pomphi have, individually, a very short duration; they are constantly subsiding and being replaced by others, and so seem to be always shifting their position. However, they are not quite so evanescent as those of the acute kind.

As in the febrile nettle-rash, the eruption is constantly varying in extent, and at irregular intervals it vanishes altogether for a time. In some cases, it is “regularly” intermittent.

Sometimes the wheals, instead of being flat and but slightly raised, project more boldly, and are of a hemispherical shape, attaining the size of a nut or even that of a walnut (*U. tuberosa*).

A large proportion of the cases of chronic urticaria that occur in hospital practice, are dependent on the irritation occasioned by the presence of the *pediculus corporis*.

The regions most commonly attacked by Urticaria are, the shoulders, the loins, the thighs, the face, and the fore-arms.

It affects, preferably, infants, children, or young persons, especially such as have fine and delicate skins; it is commoner with females than males.

It is often associated with derangement of the digestive organs. Sometimes it is connected with morbid conditions of the uterus or of the urinary organs.

High living and intemperance appear to create a susceptibility to Urticaria.

In persons specially predisposed, the rash may be excited by the operation of various causes: sudden exposure to cold during warm weather, over-exercise, strong mental excitement, the ingestion of certain kinds of food, especially shell-fish or preserved fish, or of certain drugs, for example, Valerian or Copaiba; the contact of certain irritants with the skin, for example, some kinds of "jelly-fish," certain caterpillars; some plants, for instance, the stinging-nettle; the bites of gnats, mosquitoes, lice, etc. But it must be remarked, that people in whom Urticaria is readily excited by some of these causes are quite insensible to the operation of others.

TREATMENT.—In *U. febrilis*, the patient should be kept quiet, and his diet should be simple and moderate; gentle laxatives and cooling salines should be administered; if there be much fever, small doses of tartar-emetic will be proper; and if there be any over-acidity of the stomach, magnesia should be prescribed.

In *U. ab ingestis*, an emetic should be given as early as possible, and, as soon as it has operated, an efficient purge should be administered.

The patient should be put to bed, and limited, until his attack is over, to bland demulcent drinks. If he be much depressed, a dose or two of chloric ether will be serviceable.

In either variety of the acute form, it is better to dispense with local applications.

In *Chronic Urticaria*, it sometimes happens that there is some offending article in the patient's diet, and that he requires only to abstain from this particular kind of food in order to be quit of his eruption. When this is so, the offending cause varies in different cases, and, sometimes, much pains may be requisite in order to discover it.

In some cases, the internal administration of the mineral acids will be of service, and with this may be advantageously

conjoined the use of mineral acid baths. But when the eruption is connected with habitual over-acidity of the stomach, the alkaline carbonates, administered both internally and externally, are indicated.

When the complaint is intermittent, quinine should be given in tolerably large doses.

If the disease be associated with a plethoric habit of the system, the patient should be restricted for some time to a bread-and-milk diet.

Vapour baths and the vapour douche are often valuable remedies in severe cases of long standing, and their operation is assisted by the administration of small doses of arsenic.

Pomphi, resulting from local irritation, must be dealt with according to the nature of the irritant. Thus, if pediculi be the cause, the remedy must be calculated to destroy them. For the stings of insects, the best antidote is the application of a dilute solution of ammonia.

CHAPTER II.

SQUAMÆ.

THE squamous or scaly eruptions are characterized by the appearance of laminæ of morbid cuticle, which are hard, thickened, whitish, and opaque, and may cover either skin of the natural colour, or slightly-raised, reddened patches of skin.

The squamous eruptions are, Psoriasis, Pityriasis, and Ichthyosis.

In *Psoriasis*, large, thick, white, nacreous scales cover and adhere closely to a thickened, creased, tawny-red patch of skin.

In *Pityriasis*, loosely-adherent, thin, opaque, white scales cover a harsh surface, which may be either of the natural colour or unduly reddened ;

While *Ichthyosis* is a peculiar congenital condition of the skin, in which the epidermis, in place of being smooth, unctuous, soft, and elastic, is dry, harsh, rough, and unyielding.

SECTION I.—PSORIASIS.

PSORIASIS, or the "English leprosy," as it is sometimes called, appears in the shape of dry, white, laminated incrustations, which exhibit a mother-o'-pearl-like or even silvery lustre, and conceal tawny-red, slightly elevated, and somewhat wrinkled patches of skin. At a little distance, the

skin looks as if it had been splashed with wet mortar, which had been allowed to cake on it. If one of the incrustations be detached by means of the finger-nail, it will be found to adhere pretty firmly to the skin, and to be of about the thickness of cardboard. If the detached crust be broken across, its laminated structure will be displayed; and if the tawny-red patch, laid bare by its removal, be pinched up between the finger and thumb, and compared with a similar pinch of the healthy skin, it will be found to be palpably thickened.

The eruption commences as small white spots of the size of a pin's head; these gradually increase in diameter, so as to form patches of various size and shape.

Psoriasis usually appears first over the elbows and knees; and, when the eruption has spread more extensively, it still remains worst at these places. It next appears on the back, more especially the loins, and, afterwards, on the chest and belly. It is not uncommon on the hairy scalp, and on the palms of the hands, and the soles of the feet. When it attacks the face, where it is comparatively rare, it affects, chiefly, the upper part of the forehead and the eyebrows.

Its varieties, omitting those names which refer only to its different situations, are designated by the terms "*guttata*," "*gyrata*," "*diffusa*," and "*circinata*."

The term *P. guttata* is employed when the disease occurs as small rounded patches, from the size of a pin's head to that of a two-shilling piece, giving the skin the appearance of having been splashed with mortar. *P. gyrata*, when it appears in wavy lines of the thickness, usually, of about half an inch: this is a rare variety. *P. diffusa*, when it forms large irregular patches. These are more commonly found extending from the knee down the front of the leg, or from the elbow along the outer aspect of the forearm. *P. circinata* (or "*Lepra vulgaris*"), when a spot, by spreading at its circumference and healing at its centre, forms an annular patch of the disease.

Psoriasis, when it affects the palms and soles (*P. palmaris*

et plantaris), is characterized by larger, thicker, and less lustrous scales than it produces in other situations, and by deep painful fissures in the skin, which exude a serous or sanguineous fluid. When the nails are affected (*P. unguium*), they become thickened, opaque, sometimes greyish in colour, often deeply grooved transversely, and not unfrequently pitted in a peculiar manner; they may become more or less laminated, and in some cases the nail gets replaced by a scaly incrustation.

Psoriasis is usually attended with more or less itching; it is not unfrequently found associated with eczema.

It generally fixes on the robust and healthy, and is commoner at the prime of life. It follows an extremely chronic course, and its tendency is to recur again and again after apparently complete recovery. It is one of the most striking examples of a constitutional disease of the skin, and is always more or less symmetrically developed on the opposite halves of the body. It is in some instances an hereditary complaint.

Vivid mental emotions, or over-indulgence in spirituous liquors, appear to act occasionally as exciting causes of the disease. In long-standing cases, it is usually more developed in the winter than in the summer.

Pregnancy appears to be unfavourable, and lactation to be favourable to its development. Local injury, or irritation of any kind, will often determine, in persons predisposed to the disease, the appearance of the eruption at the injured spot.

A well-marked case of Psoriasis can scarcely be mistaken for anything else, by any one who has ever seen a fair sample of the disease; but, in some instances, Psoriasis may be mistaken for a squamous syphilide (the so-called Syphilitic Psoriasis), for eczema, for lichen, or for pityriasis.

But in the *squamous syphilide*, the patches do not attain the size that is commonly reached by those of simple Psoriasis. The scales are smaller, scantier, thinner, and are confined to the middle of the patch. The reddened skin,

though of a tawny hue and somewhat swollen as in Psoriasis, is, however, smooth and shining, in place of being rough and creased, and the skin affection is usually accompanied with other symptoms of secondary syphilis.

In *eczema*, even in its driest and most scaly condition, the scales have, in comparison with those of Psoriasis, a moist, semitransparent, and thin appearance, and are far more easily detached from the reddened surface that they imperfectly conceal.

In *lichen*, when it assumes the annular form, there may be some resemblance to annular Psoriasis; but the scantiness of the scales in lichen, their want of opacity and lustre, and the more rugged appearance of its reddened patches will distinguish it.

In *pityriasis*, there is much less creasing and thickening of the skin, and the scales are thinner, finer, and less abundant than in Psoriasis.

TREATMENT.—If the eruption be of recent date, if it be rapidly extending, and the patches much inflamed, in other words, if the disease be acute, emollient applications will be required; the diet should be moderated, and cooling salines be given until the inflammatory appearance of the eruption has subsided.

In chronic cases, the liquor arsenicalis may be given in doses of from two to five minims thrice daily; but in some cases, a course of this medicine is inadmissible, on account of its giving rise to gastro-intestinal inflammation; and although it is a remedy of decided efficacy in many cases, yet, in others, it appears to exert no influence whatever over the progress of the disease.

Phosphorus, administered in the form of solution in oil, is in many instances an effective remedy. It may be given, in doses of one tenth of a grain, thrice daily; but it is not always well tolerated. In some cases it occasions loss of appetite, nausea, and, if persisted with, pallor and loss of flesh. These conditions, however, are readily recovered from on discontinuing the remedy.

The tincture of cantharides, in some cases, speedily produces marked improvement in the appearance of the eruption ; but, however cautiously it be given, it is apt to produce irritation of the genito-urinary organs, as well as of the stomach and intestines.

The iodide of potassium, given in five-grain doses, twice daily, is a less objectionable and often as efficient a remedy as either of the two above mentioned.

In cases where the patient is of lymphatic temperament, and exhibits a pale and pasty complexion, the disease often presents some of the characters of *eczema*, conjoined with those of Psoriasis. In such cases, cod-liver oil and steel are the best internal remedies.

But it is on the judicious use of local applications that success in the treatment of Psoriasis mainly depends.

In some cases, (for example those of the *eczematous* kind,) much is to be gained by the application of ointments of some of the preparations of mercury,—the ammonio-chloride or the oxide, or the green iodide,—in such proportions as the extent of the eruption and the appearance of the patches may seem to indicate. If the eruption be extensive and appear much inflamed, the ointment should contain a smaller proportion of the mercurial preparation than if the patches be few and indolent. The oxide or the ammonio-chloride may be used in larger proportions than the green iodide, which is a more irritating preparation.

In “inveterate” cases, tarry preparations are amongst the best of local applications. For example:—

The Unguentum Picis Liquidæ diluted, if necessary, with lard. Huile de cade, applied by itself, or mixed with a small proportion of yellow wax. Creasote, mixed with white wax in equal quantities. The empyreumatic oil of the white beech diluted or not with lard.

Chrysophanic acid, in the form of a twenty-per-cent. ointment, is, in many instances, a more serviceable application than any of the tarry preparations; but it requires more than ordinary care in its use. The local erythema, which

this remedy gives rise to, needs to be watched for and controlled. The specially irritant effect on the eyes, produced by even a trace of the ointment accidentally conveyed to them, must also be guarded against.

Pyrogallic acid in the form of a ten-per-cent. ointment has also been employed with success in the local treatment of Psoriasis; but it presents some notable disadvantages. The most formidable of its drawbacks is that it cannot be applied over extensive regions of the skin without dangerous risk being incurred from its absorption into the system.

Beta-naphthol used as a ten-per-cent. ointment, has the advantage of being a colourless and comparatively odourless application. Although of only moderate efficacy, it thus finds its use in the treatment of Psoriasis of the face, which as a rule is less difficult to treat than Psoriasis affecting other regions.

Turpentine has been employed with success as an application in Psoriasis.

But in all cases, before the use of an ointment is commenced, the squamous incrustation should be removed by poulticing, in order that the remedy may come well in contact with the skin itself.

Painting the patches with the Linimentum Iodi is often of much service, and, in some cases, a scanty application to them of strong nitric acid diluted with an equal quantity of water, produces marked improvement.

The treatment of Psoriasis by impermeable underclothing is an efficacious method. The best material for this purpose is thin vulcanized waterproofing. The most convenient kind is that composed of the thin fabric known as "jaconet," spread with rubber on one side only. The rubber side of the waterproofing is worn next the skin. Home-made articles of underclothing of this material may readily be constructed: the patient's ordinary articles of underclothing serving as patterns. The sutures should be made overlapping and should be sewn with a double seam.

The prolonged water-bath is an efficient but somewhat

irksome means of treating Psoriasis. It demands the immersion of the patient in the bath, for three hours in the morning and three hours in the afternoon, day after day. It is necessary that the bath should be maintained at an uniform temperature of 92° (Fahrenheit).

The continuous water-bath is a speedier means of treating Psoriasis than the "prolonged water-bath." When this method is employed, the patient not only remains in the bath all day, but also goes to sleep in it at night, and throughout the treatment never emerges from the bath for more than five minutes at a time. The bath is furnished with a water-proof pillow. In this method the careful regulation of the temperature of the bath becomes necessarily a matter of considerable importance. If the temperature be allowed to rise, only a degree or two above 92°, the patient within a few hours begins to perspire profusely. On the other hand, if the temperature be allowed to drop, only a degree or two below 92°, the patient within three or four hours begins to shiver with cold.

The author, who has employed both the "prolonged" and the continuous water-bath, finds that the latter abridges the duration of treatment by about one third. On the other hand, the prolonged maceration of the thick epidermis of the soles of the feet leads, after a few days' immersion, to a somewhat painful tension of the soles. This tension however, after two or three days, subsides owing to the casting off of the macerated epidermis. With that exception, neither of these methods occasions the least inconvenience to the patient or impairs either his health or his cheerfulness.

SECTION II.—PITYRIASIS.

PITYRIASIS is a dry, harsh condition of some portion of the skin, which loses its natural softness and suppleness and becomes covered with very dry, minute, thin, opaque, white scales. These are readily detached by the slightest friction,

or may fall spontaneously, but are renewed as fast as they fall off. Sometimes the skin is reddened as well as harsh and dry, and may even be slightly thickened and creased so as to approach the condition already described as proper to Psoriasis. There is usually more or less itching of the affected skin, but, unless the surface involved be extensive and considerably inflamed, there is no constitutional disturbance.

The varieties of Pityriasis are distinguished by the terms "alba," "fusca," "rubra," and "pilaris."

P. alba attacks especially the hairy scalp, and is characterized usually by an *abundant* formation of scurf. Although there is generally no redness, there is always considerable itching of the affected skin. The scales of which the scurf consists are thin, dry, opaque, and white; they are readily detached in great numbers by scratching or rubbing the part. Often, the hair becomes greatly thinned in long-standing cases of this complaint; but, when the disease ceases, the hair grows again as thickly as before.

P. fusca affects especially the face and neck, and occurs in the form of irregularly-rounded patches, varying in size from that of a threepenny-piece to that of a half-crown. The affected skin is a little thickened and slightly creased; is of a faint tawny-red colour, and is sprinkled over with extremely fine, white, loosely-adherent, floury scales, which are much less opaque than those of *P. alba*. No itching, or scarcely any, attends this eruption, but when irritated (for example, by sitting before a fire, by facing a cold wind, or by using strong soap to the face and neck) the patches are apt to occasion a pretty severe sensation of "burning" and smarting.

The remaining two varieties of Pityriasis are rarer than either of the two above described.

P. rubra is situated generally on the chest, but is sometimes extensively spread over the upper part of the body and the upper limbs. The skin is much reddened, and the scales are larger and more adherent than in *P. fusca*. The

eruption is attended with itching and tingling, and is sometimes accompanied with slight febrile disturbance.

P. pilaris affects only the orifices of the hair-follicles, leaving the intervening skin intact. It may invade every region except the scalp. It affects especially the hair-follicles of the outer surfaces of the limbs. The orifices of the follicles become thickened and prominent, and the root of each hair gets surrounded by a small, hard, conical elevation, composed of minute, adherent scales. The skin feels dry, harsh, and rough, and presents the appearance commonly known under the name of "goose-skin." There is no redness of the affected surface, but there is often considerable itching. *P. pilaris* is an extremely chronic and obstinate affection.

Pityriasis is often an hereditary disease. On the scalp it is commoner with females than with males; with those who wear their hair long than with those who keep it cut short; and with people who have dark hair than with the fair. Children are especially liable to Pityriasis, both of the scalp and of the face.

Chronic eczema often leaves behind it a condition of the skin which is identical with Pityriasis rubra.

In persons predisposed, mental anxiety, bodily fatigue, or over-indulgence in the pleasures of the table, appear capable of acting as exciting causes of the disease.

In children, Pityriasis sometimes lasts only for a short time, but, in adults, it is generally a chronic disease, lasting for several months, or even many years.

Pityriasis is liable to be mistaken for ichthyosis, psoriasis, herpes circinatus, or eczema.

But *ichthyosis* may always be distinguished by the history of the case, since the disease is congenital.

In *psoriasis* the scales are coherent, forming dry white incrustations, which adhere pretty firmly to the inflamed patch of skin that is covered by them. The surface of the incrustation exhibits a nacreous sheen, and the affected skin is itself considerably thickened.

In *herpes circinatus*, which is apt to be confounded with *P. fusca*, the patches are more perfectly circular; their margins, which are abruptly defined, are more elevated and scaly than their central portions.

In *eczema* the affected surface has a much moister appearance, and the scales resting on it are yellowish, semi-translucent, and larger than those of Pityriasis.

TREATMENT.—In *P. alba*, affecting the scalp, the hair should be cut short, in order to facilitate the removal of the scurf and the application of topical remedies. Brushing of the head should be avoided as much as possible, and the hair should be arranged, when necessary, by means of the comb alone. Soap is a favourite application in cases of this kind, because it removes the scurf, and so, for the same reason, is borax. Acetic acid is the basis of most of the washes used by hairdressers for the “removal of dandriff from the scalp;” but these remedies act merely as detergents, they soften the scales, and so facilitate their removal, but they do not improve the condition of the scalp on which the constant formation of the scales depends; and, if applied too diligently, are apt to irritate the scalp, and leave it in a worse condition than before. Ointment of the precipitated oxide of mercury, containing in the oz. gr. xv to 3j of the oxide, is an excellent remedy if there be much tenderness of the scalp, and if the disease be recent. In more chronic cases, ointment of the precipitated sulphur, in the proportions just mentioned, is a preferable application. When the scales are very abundant, and more than usually coherent, so as to form a loose layer of some thickness, an ointment composed of a drachm of creasote, a drachm of white wax, and an ounce of lard, is one of the most efficient of remedies.

Often, in such cases, arsenic administered in small doses is of service; and when, as often happens, the health is feeble, a nourishing diet with tonics and chalybeates may be required. Very often Pityriasis of the scalp is kept up, in spite of appropriate treatment, by the patient wearing some irritating species of head-dress.

In *P. fusca* the use of nitrate of mercury ointment is generally sufficient to remove the patches, but in chronic cases a more stimulating application, such as ointment of the green iodide of mercury, may be called for.

In *P. rubra* the diet may require to be restricted, and laxative salines may be indicated; the applications to the affected surface should, in the first instance, be of a soothing and mildly-astringent kind, such, for instance, as a lotion of the liquor plumbi (a drachm to the half-pint of water, with an ounce of glycerine), or zinc ointment; afterwards the applications directed for *P. fusca* may be used.

In *P. pilaris* tar ointment is probably the best application.

SECTION III.—ICHTHYOSIS.

ICHTHYOSIS, or the "Fish-skin disease," is a peculiar congenital scaly condition of the skin, in which there is neither redness of the cutis nor any sensation either of heat, itching, or tingling. The scales are pretty firmly adherent to the surface on which they rest, and are not readily detached. If pulled off, their separation does not occasion any pain, and the surface disclosed is neither rough as in psoriasis, nor moist as in eczema. In many cases the formation of scales is accompanied with an excessive development of pigment. The disease is sometimes general, sometimes local. When general, the palms of the hands, the soles of the feet, the armpits, the groins, and the eyelids, are always left unaffected. When partial, it affects especially the limbs, more particularly the neighbourhood of the knees and elbows.

On different parts of the same individual it sometimes presents widely different appearances.

However considerable may be its development, or for however long a period it may have continued, it exercises no perceptible influence on the general health.

Although it never spontaneously ceases, it is sometimes

greatly modified under the influence of the seasons. It is generally less marked in the summer than in the winter; this is, doubtless, due to the larger quantity of liquid secreted by the skin in warm weather.

Ichthyosis is sometimes an hereditary complaint.

Its varieties are *I. nitida*, *I. serpentina*, and *I. cornea*.

In *I. nitida* the skin resembles that of a fish; the scales are large, and have an imbricated arrangement, and exhibit a mother-of-pearl-like glitter. In some instances, however, the scales, in place of being pearly white, are of a dark-grey colour.

I. serpentina is so called from the skin in this variety resembling that of a snake. The skin is dry and glossy, and the epidermis is divided into little angular sections by a number of fissures which decussate with one another.

In *I. cornea* the epidermis is much hardened, greatly thickened, and deeply-fissured, so as to form a series of closely-packed, horny, mobile excrescences, which are usually of a dark olive-brown colour: these are sometimes so long and so hard that by passing the finger-tip rapidly over the surface, a dry, rattling sound may be produced. Persons affected with this variety of Ichthyosis have exhibited themselves as a public show, under the name of porcupine-men.

Ichthyosis may be mistaken for psoriasis, or for pityriasis.

But *psoriasis* occurs in the form of definite patches, which are separated from one another by intervals of sound skin; whereas Ichthyosis extends diffusely, usually over a large surface, sometimes over nearly the whole of the body, and the diseased surface has no definite limit, but fades, by insensible gradations, into sound skin.

In *pityriasis* the scurf is much finer and is much less firmly attached.

In both psoriasis and pityriasis, there is redness of the skin and itching or smarting sensations.

TREATMENT.—The treatment of the nacreous and the serpentine varieties should be commenced by the use of

vapour baths, vapour douches, or warm-water douches, or of baths, lotions, or ointments of the alkaline carbonates.

When by such means the skin has been temporarily restored to a healthy condition, this may often be maintained by constantly keeping the surface slightly greased with almond or olive oil, which should be washed off at least twice a week. Glycerine, however, is a still more effectual agent for this purpose than oil: it may be diluted with twice or four times its quantity of water before use.

In the horny variety, the treatment should be commenced by painting limited portions of the surface in succession with blistering fluid, and when, by this means, the horny excrescences have been removed, the skin should be treated as in the other varieties.

Although the treatment of Ichthyosis cannot, at least in the present state of our knowledge, be radically curative, much may be done in the way of palliation. Such means as are recommended above will suffice to keep most cases of the disease in a state of abeyance so long as the remedies are persevered with.

Various internal remedies, more particularly cod-liver oil, have been advocated as being of use in the treatment of Ichthyosis, but their efficacy is very doubtful.

CHAPTER III.

PAPULÆ.

THE papular (or "pimply") eruptions are distinguished by the formation of minute, solid, sensitive growths, which project from the surface of the skin.

The papular eruptions are, Lichen, Strophulus, and Prurigo.

Lichen is characterized by an eruption of numerous minute, red, acuminate papules, clustered together, attended with much itching, and succeeded by a harsh, wrinkled, reddened, thickened condition of the skin. In one of the varieties of this eruption, however, the papules are fairly large, are lilac-coloured, and although they produce by their agglomeration a thickened condition of the skin, yet the thickened patch is smooth burnished and lilac-coloured.

In *Strophulus*, there is itching, but the papules are distinct from one another. They are larger than in lichen, and may be either whiter or redder than the surrounding skin. They are slightly acuminate.

In *Prurigo*, as its name denotes, the itching is intense. The papules are distinct from one another. They are comparatively large, but are flat and only slightly elevated. They are of the same colour as the surrounding skin, and are covered at their tips by small black crusts.

SECTION I.—LICHEN.

LICHEN, or the "Dry Itch," as it is popularly called, is an eruption which consists of a number of minute red papules clustered together on an inflamed portion of the skin.

After a short time, the tops of the papules become covered with fine, white, branny scales, or (getting excoriated by the repeated scratching of the patient) they exude minute drops of serum or of blood, which dry up speedily into small, hard, grey or black crusts.

Soon the affected skin becomes thickened; its natural linear markings or creases get deepened, and it loses its elasticity, so that if the part affected be in a position where it is frequently stretched by the movements of the patient, it parts opposite one or more of these furrows, which thus become converted into cracks, or even deep fissures. This is a common result when the disease occupies the back of the wrist.

The itching that accompanies Lichen is usually severe, and there is often with it a sensation of burning in the affected skin. These sensations always become aggravated towards the evening.

Lichen occurs most commonly in persons of nervous or sanguine temperament. It is met with at all ages, but it affects preferably adults. It is commoner with females than males. It is sometimes hereditary. Certain occupations, viz. those which subject any portion of the skin to the constant action of irritants, favour the appearance of the disease. It is commoner at the spring and fall than at other times of the year.

Its invasion may be determined by over-feeding, intemperance, exposure to cold, fatigue, or by depressing emotions.

It affects usually the backs of the hands and wrists, or the back and sides of the neck, or the front of the thighs, or the back of the trunk. Its rarest situation is the scalp.

It more commonly follows a chronic than an acute course, and is apt to return after apparent complete disappearance.

The varieties of Lichen are *L. simplex*, *L. circumscriptus*, *L. agrius*, *L. inveteratus*, and *L. planus*.

The term *simplex* is applied to the disease when it presents the characters above described in a comparatively mild

degree, is diffused over a surface of some little extent, and has no definite outline; *circumscriptus*, when it occurs in rounded patches (of the average size of a five-shilling piece), with well-defined outlines; *agrius*, when the eruption is acute, is ushered in with febrile symptoms, and partakes, in some degree, of the character of eczema or of impetigo, that is to say, there is an admixture of vesicles or of pustules with the papules; *inveteratus*, when the disease has become very chronic and very severe. This variety is characterized by considerable thickening of the affected skin and unusual depth of the furrows on its surface. In some cases of *L. inveteratus*, the scales that are formed on the diseased surface are so copious and so thick as to give the disease much of the appearance of psoriasis.

Lichen planus presents an appearance altogether distinct from the other varieties of Lichen. It distinguishes itself from them by the colour of its constituent papules, by their size, their form, the character of their surface, and, when the papules have become aggregated into patches, by the appearance of the patches. The papules, in place of being minute, are of notable size, varying on the average from that of a mustard-seed to that of a hemp-seed. Instead of being acuminate they are remarkably flattened, and their surface presents a peculiar burnished appearance; this gives them the aspect of having been worn down and polished as if by the long-continued friction of some smooth object. Their colour is a peculiar lilac hue, which however is not uniformly diffused, but is produced by an extremely faint lilac tint minutely marbled with streaks of darker lilac. The eruption affects especially the limbs. The individual papules are often arranged in a remarkable manner, that is to say, are spaced somewhat apart in single file, so as to form dotted lines running straight down the affected limb for some little distance. This arrangement of them may be especially noticed when they occupy, as they often will, the anterior surface of the forearm. The smaller papules are rounded or oval, the larger ones of irregular form. When a number of

papules have become aggregated into a patch of notable size, the patch (instead of presenting a roughened and creased appearance) remains smooth and burnished, and the peculiar mottled lilac hue of the eruption becomes somewhat accentuated. Exception to this statement, however, must be made in some instances of the eruption when affecting the legs. In this situation *L. planus*, in common with some other eruptions, sometimes becomes the seat of a papillomatous or warty growth. In such case the patches lose their flatness, their burnished appearance, and their lilac colour, and become rough, modulated, harsh, and of a dusky brown hue. The itching that accompanies *L. planus* is generally severe.

Other terms have been applied to Lichen, viz., *lividus*, when occurring in cachectic individuals the papules are livid; *gyratus*, when the disease forms sinuous bands; and *tropicus*, which distinguishes a variety, resembling *L. simplex*, that is common in tropical climates. What has been termed *L. urticatus* is a variety of urticaria. *L. pilaris* again is a form of pityriasis.

Lichen simplex may be mistaken for prurigo, for scabies, or for strophulus; *L. agrius*, for eczema; *L. circumscriptus* for herpes circinatus, for pityriasis, or for psoriasis; and *L. planus* for psoriasis.

But in *prurigo* the papules are large, flat, isolated, and most of them are covered with a small black crust.

In *scabies* the situations occupied by the eruption, its multiform character, and the presence of "acarian furrows," will serve for distinctions.

Strophulus affects only young children; it is always an ephemeral eruption; the papules are larger than in lichen, and are usually scattered loosely over the surface. When grouped, the papules in each group are few in number, and the patches are small. There is no induration or furrowing of the skin in strophulus.

Eczema may be distinguished by its appearing at first in the shape of vesicles instead of papules, subsequently by the

even surface, the superficial excoriations, the abundant plastic serous secretion, the broad moist yellow flaky incrustations, and by the thinned state of the skin, which contrast with the roughened, dry, papulated surface, the small dry grey crusts, and the thickened cutis of Lichen.

Herpes circinatus may be recognized by its shape being more regularly circular than that of *L. circumscriptus*, by its scales being thinner and softer, and its centre being less rugous; moreover, it spreads with much greater rapidity.

Pityriasis (fusca) may resemble *L. circumscriptus*, but there is generally but little if any itching in this form of pityriasis; the induration and thickening of the skin is much less marked, and the scales are much more readily detached than in Lichen.

In *psoriasis* the skin is considerably thickened and wrinkled, but not to the extent seen in *L. circumscriptus*; the scales, on the other hand, are much thicker and more copious, and exhibit a special silvery lustre; the disease, moreover, affects especially the elbows and knees.

TREATMENT.—In an ordinary acute attack of *L. simplex* much interference is not called for; a bland and moderate diet, abstinence from fermented liquors, and the wearing of soft underclothing (silk is the best material) are sometimes all that is necessary. If the skin be very irritable, emollient tepid baths may be ordered; and if there be much feverishness, refrigerant drinks and mild laxatives may be given. In a severe attack of *L. agrius* it may be necessary to enjoin a very restricted diet, to apply leeches in the neighbourhood of the inflamed surface, and to employ starch or bread poultices. In a less severe attack, excluding the surface from the air by means of the blandest applications, such as sweet almond oil, cold cream, glycerine, or by dusting it over with lycopodium, may at the outset suffice for local treatment. If when the inflammation has decreased the disease exhibit a tendency to assume the chronic condition, much benefit is often to be derived from the use of alkaline baths, which may contain an ounce of the carbonate of potash or of soda

to the gallon of water; in some cases baths of sulphuret of potassium may be substituted with advantage; these measures should be conjoined with the internal administration of the fixed alkalis or their carbonates. In obstinate cases of Lichen, where the skin has become much thickened and is desquamating, lotions of liq. potassæ ʒss.—ʒss. to ʒj aq. (the stronger solutions requiring great caution in their use), sulphur-vapour baths, the vapour-douche, ointments of calomel, camphor, tannin, the green iodide of mercury, the bichloride of mercury or tar, are proper applications. Internally small doses of Donovan's solution, or of some one of the sulphurous mineral waters, should be given. Cases of chronic Lichen that are attended with debility, as in *L. lividus*, are greatly benefited by such tonics as the dilute nitromuriatic acid, or the triple citrate of quinine, iron, and strychnine. Cauterization with nitrate of silver is useful in some cases of persistent *L. circumscriptus*.

SECTION II.—STROPHULUS.

STROPHULUS, or the Tooth-rash, is an acute eruption which is peculiar to infancy and childhood, and occasions considerable irritation. It appears in the form of slightly acuminate papules of the size of a pin's head or of a millet-seed; the papules are not confluent, as they usually are in lichen, but are distinct from one another; they are larger than those of lichen; they may be either whiter or redder than the surrounding skin.

The disease is of most frequent occurrence in infancy. It may be excited by errors of diet in the mother or wet-nurse while suckling, or by the more direct administration of unsuitable food to the infant. Over-clothing, rough flannel next to the skin, uncleanness, confinement to close and heated apartments, and, most of all, the constitutional disturbance produced by the eruption of the milk-teeth, are

also determining causes of Strophulus. Strophulus is a trivial affection which rarely lasts longer than a week or two, and is not prone to recur.

Its varieties are *S. intertinctus*, *S. confertus*, *S. volaticus*, *S. candidus*, and *S. albidus*.

S. intertinctus is characterized by papules of a vivid red colour, sprinkled scantily over the surface, distinct from one another, often intermingled with erythematous spots or patches. In *S. confertus* the papules are smaller, and are less red than those of the preceding variety, but are more numerous and are often clustered together. *S. volaticus* appears as small, red, rounded patches, each of which is made up of a few papules closely grouped together: these patches last only for a day or two, and disappear at one spot to reappear in another. In *S. candidus* the papules are large and distinct; they have a smooth and shining surface, and are lighter-coloured than the surrounding skin; they are not, however, surrounded at their base by any inflammatory areola.

The above varieties of Strophulus are attended with slight feverishness, and when dependent either on visceral derangement or dentition, with the symptoms peculiar to those causes respectively.

The average duration of the eruption is about a week, but it occasionally lasts for as long as three weeks. When it disappears it is succeeded by a slight ephemeral furfuraceous desquamation. Strophulus affects chiefly the exposed parts of the surface,—the face, forearms, and back of the hands, but occurs commonly on other parts of the body.

S. albidus was classed under the genus Strophulus, on account of its possessing what were thought to be the essential characters of this affection, namely, that it consists of small discrete papules, and is an infantile disease. However, in more important details it differs widely from the other species of Strophulus; for example, the substance of the papules, instead of being made up of infiltrated fibro-

cellular tissue, consists of a collection of inspissated sebaceous matter. This complaint comes more properly under the heading of "sebaceous diseases of the skin."

Strophulus is apt to be mistaken for lichen, for scabies, or for urticaria.

But in *lichen* the papules are small and clustered together, and in young children the eruption is generally widely spread, so that a large continuous surface becomes harsh, rough, and inflamed.

In *scabies*, as it occurs in infants, the eruption on the hands and feet is usually vesicular. The "acarian furrows" are readily found. The eruption generally appears first on the nates. The history of contagion is readily made out, and the nurse is almost invariably affected.

In *urticaria* the papules are larger and flatter, and are mingled with still larger, irregularly-shaped pomphi. They are very ephemeral, disappearing suddenly at one place, and reappearing as suddenly at another. This latter character, it is true, is shared also by *S. volaticus*, which approaches nearly in nature to *Urticaria*; but the diagnosis between the two is of but little practical moment, since they are both benefited by the same measures, and are of similar origin and nature.

TREATMENT.—Tepid glycerine baths, or sponging with milk and water, or powdering the skin with starch or lycopodium, are generally all that is necessary. If the child is suckling, its nurse should take some saline refrigerant drink. If the gums are swollen and inflamed at any part, they should be lanced. When the eruption is connected, as it often is, with acidity of the stomach, this should be corrected by means of one or other of the alkaline carbonates (carbonate of magnesia, of soda, or of lime being selected, according to the state of the bowels), aided, if need be, by some carminative. The room should be kept cool, and the infant's clothing should be light and soft.

SECTION III.—PRURIGO.

PRURIGO is a disease characterized by an eruption of broad, slightly-raised flat papules, of the same colour as the surrounding skin, distinct from one another, covered at their tops by small black crusts, and accompanied by more or less intense itching.

Prurigo may be widely diffused over a large extent of surface, or it may be confined to a very limited area.

THE DIFFUSED KIND commences by itching of some region, which at once provokes the patient to scratch. Soon an eruption of small scattered flat papules arises; the tops of these being caught by the patient's nails are soon scratched off; a slight extravasation of blood ensues, which, coagulating, forms the small black crusts which cap the papules. The itching, which is increased towards the evening, but is always easily supportable, becomes gradually extended over a greater area; in this condition it is called *P. mitis*.

In a severer form, *P. formicans*, the irritation is more intense, and is of a different character. The itching is accompanied by pricking and burning sensations, and a feeling as if a multitude of ants were crawling over the skin. It gradually increases in severity and extent, so as to be almost insupportable; the patient is irresistibly impelled to scratch, and seeks relief by tearing the skin deeply with his nails. The irritation is always most severe in the evening and the early part of the night, which is generally far advanced before the sufferer gets any rest; he may be even altogether deprived of sleep for several nights in succession. It is augmented, too, by the ingestion of a full meal, or of any spirituous drink, or by the warmth of a fire; and I have noticed that the complaint is always much worse in summer than in winter. In this variety the papules are always broader and flatter, and are surmounted by thicker and

blackcrusts than in *P. mitis*; they are, moreover, intermingled with deep linear excoriations, sealed by streaks of black coagulum, which are the marks left by the patient's nails.

In a variety yet more severe (*P. senilis*), which is met with chiefly in old persons, the itching gets gradually more and more distressing. The papular eruption becomes more extensively spread, and the marks of the patient's nails deeper. The skin becomes, at some points, thickened and rugous; at others, dark-coloured. The papular eruption gets intermingled in some places with ecthymatous pustules; in others, with urticarious wheals and fugacious erythematous patches. The worry of mind and the loss of sleep entailed by this frightful disorder seldom fail to impair, in some measure, the general health. A patient who has suffered long from the complaint generally wears a haggard and anxious face. In some instances the prolonged and constant torment has led the sufferer to commit suicide.

General Prurigo is met with in persons of all ages. In children and young persons it assumes usually the form of *P. mitis*, in middle-aged adults that of *P. formicans*, and in the aged the condition known as *P. senilis*.

As regards its situation;—the regions chiefly affected by it are, according to my own researches: either the back of the neck and of the shoulders, together with the upper portion of the front of the chest: or the small of the back, together with the nates, and the anterior and outer surfaces of the thighs. It may be very severe in either of these two situations without being very marked in the other. I have seen it occupying all parts of the body, except the following: the hairy scalp, the face, the armpits, the fingers, the palms of the hands, and the soles of the feet. General Prurigo is a very chronic disease, lasting for months, or even years, and is often extremely intractable.

A form of Prurigo (*P. pubis*), which holds a middle place between the diffused and circumscribed kinds, is that which is occasioned by the pediculus pubis, or crab-louse. This

commences over the pubic region, and gradually extends itself upwards over the abdomen and downwards over the thighs. This affection is usually confined to the hairy parts of the anterior surface of the trunk and thighs, and rarely extends downwards below the middle of the legs, or upwards above the axilla. The itching occasioned by it is usually pretty severe, but the eruption consists only of scattered papules, (smaller in size than those of the varieties already described, and surmounted by redder crusts,) and of small papular urticarious pomphi. There are none of the deep linear excoriations which form so prominent a feature of *P. formicans* and *P. senilis*. The eruption, in fact, resembles papular scabies more than any other disease.

The more important of the CIRCUMSCRIBED VARIETIES of Prurigo are *P. podicis*, *P. scroti*, and *P. pudendi muliebris*.

P. podicis, or itching of the skin around the anus, is often a most tormenting and intractable affection. The irritation, which is very intense, is generally constant, but is augmented in the evening and early part of the night. In some cases, there is considerable itching of the margin of the anus itself, as well as of the skin in its vicinity. The furious scratching that this complaint provokes, generally produces a sero-mucous discharge from the anus, which is attended with some relief. When the affection has lasted for some time, the skin becomes considerably thickened, as well as harsh and inflamed, so as to resemble, in some measure, chronic lichen, and the itching gets complicated with severe burning and pricking sensations.

In *P. scroti*, there is intense irritation of the scrotum, generally of its posterior surface, accompanied, often, at first by a sero-sudorific discharge, and, later, by induration, reddening, dryness, and harshness of the affected skin. This variety often coincides with and is sometimes merely an extension of *P. podicis*.

In *P. pudendi muliebris*, the parts affected are the labia majora and minora, and sometimes also the lower part of the vagina. The irritation is, if possible, more severe and

more intractable than in either of the two preceding varieties. The impulse to scratch the itching part is so urgent and so frequent, as to drive the patient from society, and, in some instances, to give rise to nymphomania. The appearance of the parts, in some cases, remains unaltered; in others, there is some fulness and redness of the mucous surface; and, occasionally, minute abrasions, which exude a serous fluid, may be seen.

The causes of Prurigo may be summarized as follows:—(of *general Prurigo*,) the pediculus corporis, poverty, dissipation, neglect of cleanliness, drunkenness, old age, exhausting chronic diseases;* (of *P. pubis*,) the pediculus pubis; (of *P. podicis* and *scroti*,) a sedentary life, a too rich and stimulating diet, habitual constipation, ascarides in the rectum, a chronically congested condition of the rectum, internal piles, urinary calculi, old age; (of *P. pudendi muliebris*,) leucorrhœa, uterine disease, the “change of life,” ascarides in the rectum, a feeble constitution. Diabetes is also to be reckoned among the special causes of *P. pudendi muliebris*, the saccharine urine serving as a constant source of local irritation.

Under proper treatment, Prurigo sometimes disappears in two or three weeks; but it is often extremely chronic, lasting for months, or even years. Although not in itself directly fatal, it may lead indirectly to a fatal issue. The constant mental and bodily distress occasioned by it, is apt to break down the health, produce considerable emaciation, and render the subject of it more liable to be cut off by other diseases; and the despairing condition of mind sometimes induced by the long-continued tormenting sensations may even lead to suicide.

Prurigo may be mistaken for strophulus, for lichen, or for scabies.

But *strophulus* is a disease of childhood, whereas Prurigo is rather a disease of old age; moreover, in strophulus, the

* The *acarus scabiei* also produces a species of general Prurigo; this is treated of under the head of scabies.

papules are either much redder or much whiter than the surrounding skin, and they are never surmounted by black crusts.

In *lichen*, the papules are very small, acuminate, grouped closely together, of a red colour, and covered with little grey crusts, or with a furfuraceous desquamation.

In *scabies*, the different general arrangement of the eruption, its multiform character, and the presence of the acarian furrows will serve to distinguish it from Prurigo; but the most ready way of distinguishing practically between the two (one that the author believes he is the first to point out) is, that while in scabies the fingers are always more or less affected, in Prurigo, although the backs of the hands may occasionally be attacked, the fingers *never* are.

TREATMENT.—This will vary greatly, according to the cause.

In *general Prurigo*, an over-excitability condition of the skin may be calmed by lotions of alum, of acetate of lead, of corrosive sublimate, of chloroform, of ether, or of hydrocyanic acid; by ointments of belladonna, or opium; by dusting the surface with oxide of zinc; by baths of lime-water, carbonate of soda, dilute nitric acid, vinegar, alum, or corrosive sublimate, and by the internal administration of opium, belladonna, stramonium, or aconite, in suitable doses.

When the disease is associated with pediculi: a cerate made with the *fixed oil* of stavesacre-seeds, as first proposed by the author: or an ointment of the flowers of the Pyrethrum album, of precipitated sulphur, of the sulphate or sulphuret of mercury, of iodide of potassium, or of bichloride of mercury: or the use of sulphuretted water, or vapour-baths, or of cinnabar-vapour baths, or the Harrogate or Moffat waters taken internally, are the most efficient remedies. Scrupulous attention should be paid to cleanliness, and the patient's under-clothing should be frequently changed.

When the general health is much impaired, attention

should be paid to the diet, which should be nourishing but unstimulating. Bitter tonics, steel, cod-liver oil, etc., should be administered. The patient should use tepid sea-salt baths, and take regular exercise in the open air.

There are various empirical modes of treatment which have found favour with some: these are the internal administration of nitrate of silver, of arsenic, of sarsaparilla, of the decoction of dulcamara, of the alkaline carbonates, of the iodide of potassium, etc. The author's experience of these, however, is not such as to give him faith in their efficacy.

In *P. pubis*, a lotion of hyd. bichlor. gr. ij ad ℥j aq., or an ointment of hyd. am. chlor., or dusting the surface lightly with calomel, at once cures the disease. The first effect of either of these applications is, that the moribund pediculi cause more irritation even than before, but in the course of two or three hours the irritation ceases altogether.

In *P. podicis*, it will sometimes be advisable to apply leeches round the margin of the anus. Cold hip-baths, cold lotions, anodyne lotions, are generally of service. An ointment of acetate of morphia, made with "cold cream," or a suppository of tannin and morphia made with cacao-butter, will often afford great relief; citrine ointment is also a useful application.

Internally, the most efficient remedies are occasional small doses of calomel, the nitro-muriatic acid, podophyllin, sal-ammoniac, the extract of taraxacum. A mixture of mag. sulph. with acid. sulph. dil. in infusion of roses, taken thrice daily, is sometimes of service.

It is of great importance in this affection to regulate the diet, both as regard its quantity, which should be restricted, and its quality, which should be unstimulating.

In *P. scroti* the same plan of treatment should be pursued as in *P. podicis*.

In *P. pudendi muliebris* any uterine disease or irregularity should be inquired into and treated. The most efficient local applications are a dilute solution of corrosive sublimate,

a lotion of calomel and lime-water, or a solution of chlorate of potash. When caused by diabetes, the condition is best relieved by frequent ablutions, followed by the application of acetate of lead ointment.

Internally various anodynes and nervine tonics may be given, such as small doses of aconite, hyoscyamus, asafoetida, or oxide of zinc.

As before stated, severe itching of the perinæum is sometimes dependent on the presence of ascarides in the rectum. In the female these parasites not unfrequently crawl from the anus to the vulva, and give rise to distressing irritation in both situations. In such cases the treatment of the affection is confined to the removal of the cause.

CHAPTER IV.

VESICULÆ.

THE vesicular eruptions consist of small hemispherical elevations of the cuticle, which contain, when recent, transparent, colourless lymph.

The vesicular eruptions are—Eczema and Herpes.

Eczema is characterized at its commencement, by the development of numerous minute agglomerated, transparent vesicles, or by a multitude of small red fissures in the epidermis; afterwards, by a superficially excoriated, moist, reddened surface, exuding more or less abundantly a clear, plastic serum, which concretes into buff-coloured, flaky crusts; and at its termination, by a scaly desquamation of the epidermis.

Herpes is an acute eruption of comparatively large vesicles which occur in clusters, each cluster being situated on a circumscribed patch of erythematous skin, and separated from neighbouring clusters by intervals of sound skin.

SECTION I.—ECZEMA.

ECZEMA may follow either an acute or a chronic course.

ACUTE ECZEMA, in its mildest form (*E. simplex*), appears, without previous constitutional disturbance, in the form of slightly reddened patches; on which are speedily developed numerous minute, glistening vesicles, containing clear serum. These vesicles have but a short existence. In the course of

a day or two, either they subside in consequence of the fluid within them becoming re-absorbed, or they become ruptured and allow it to exude. In the one case the vesicles are replaced by minute furfuraceous scales, in the other by small thin crusts. Whether scales or crusts be formed, they soon separate, leaving the skin perfectly sound. The eruption is attended with slight itching and tingling. Its whole course occupies about a week or ten days.

In a severer form (*E. rubrum*) the phenomena of inflammation are more strongly marked. The eruption is preceded by considerable febrile disturbance. The inflamed patches are not only vividly red, but are often considerably swollen, and on examination by touch feel hot and tense. As in the milder variety, the reddened skin is thickly sprinkled with minute transparent vesicles; these may either be succeeded by desquamation, the skin remaining red for some days after their disappearance, or may give rise to a copious exudation of plastic serum, which concretes into thin, moist, cheesy flakes, which are repeatedly cast off and renewed, the skin continuing for several days red, moist, and excoriated. After a time, however, it becomes drier, and gradually loses its redness, while the flaky crusts are replaced by a dry, furfuraceous desquamation, and at the expiration of two or three weeks, the diseased surface resumes its healthy appearance.

CHRONIC ECZEMA consists either of a prolonged series of subacute attacks or of a permanently diseased condition of the skin. It presents itself under a variety of shapes.

In some cases, the most prominent phenomenon is an abundant secretion of clear, thin, serous discharge, the diseased skin looking red, swollen, and sodden.

In others the liquid secreted is less abundant, but more glutinous, exuding from a number of minute, superficial excoriations, or else from a number of little red, decussating fissures in the epidermis.

Sometimes the secretion is scantier still, and at the same time of a thicker consistence; so that instead of issuing

from the affected skin as a colourless, tenacious fluid, it concretes almost as soon as it is formed, into thin, yellow, soft, somewhat moist exfoliations. These are not very adherent to the skin beneath, in consequence of its comparatively moist condition; but whenever they get detached they are speedily replaced.

In other cases there is but little tendency to a moist secretion; the reddened skin is covered with yellowish, semi-transparent flakes, which are pretty firmly adherent to it.

In others, again, the principal character of the disease is a thinned, smooth, tense, and shining condition of the skin, which is sprinkled over with flakes so thin and transparent as to be barely perceptible.

Besides the varieties of form above described, Eczema presents in special situations certain special peculiarities.

Thus, on the hand (*E. manuum*), acute Eczema appears in the form of large vesicles, which vary in size from that of a millet-seed to that of a split-pea. They usually occur in groups, and are sometimes confluent; their appearance is attended with much heat and tingling; usually no itching is complained of until they have begun to disappear. If the eruption be copious, the hands will be red, swollen, and aching. Usually the vesicles do not rupture, but after remaining for some days shrink up, and are replaced by a dry desquamation; however, where the epidermis is comparatively thin, for instance, on the lateral surfaces of the fingers or of the hand, or on the backs of the finger-webs, they may be succeeded by the moist exfoliations that are ordinarily produced by Eczema.

When chronic Eczema occupies a position where the skin is frequently stretched or relaxed by the movements of the part covered by it, *e.g.* the palm of the hand, the knuckle or flexure of a finger, the angles of the mouth, the margin of the anus, etc., the red fissures, in place of being (as before described in the general account of Eczema) numerous and merely epidermic, are few, and extend deeply into the cutis.

When the eruption is situated near any one of the orifices of the body, it is apt to extend inwards along the mucous membrane of the passage, and conversely certain inflamed conditions of the mucous passages are apt to extend, in the form of an eczematous eruption, over the skin which is continuous with them. Thus the author has seen an eczema of the skin around the mouth result from an ulceration of the buccal mucous membrane, caused by the contact of a carious tooth. Very often eczema of the skin covering the eyelids will extend over the palpebral conjunctiva in the form of granular ophthalmia; and on the other hand, granular ophthalmia will extend in the form of Eczema over the integument of the eyelids and cheek. Eczema of the pinna of the ear, again, frequently extends up the meatus externus, and may produce either a form of otorrhœa, or may extend so far up as to cause thickening of the membrana tympani, and so some degree of deafness. Eczema of the external ear, moreover, leads to considerable induration and swelling of the pinna, which becomes tender, rigid, and more or less altered in shape.

Chronic Eczema of the leg depends in many cases on a varicose state of the veins of the limb; but whether arising from this cause or not, it is apt to leave behind it a more or less persistent brown discoloration of the skin.

When it attacks the hairy parts of the body (scalp, axillæ, or pubes), the viscid serous discharge of Eczema, which in these situations is usually pretty abundant, either keeps the hair wet, sticky, and entangled, as happens when the secretion is profuse and comparatively thin, or (if less copious and of a thicker consistence), it forms with the entangled hair dry, firmly-adherent crusts.

Of Eczema of the hairy scalp, there are, according to the author's researches, two distinct kinds.

The one, which may be distinguished as the constitutional kind, affects chiefly the anterior half of the hairy scalp, and is generally confined to that portion of it that covers the expansions of the frontal and temporal bones. This species

often coincides with *E. aurium*, and not unfrequently extends over the forehead. It occasions in many instances considerable thinning of the hair. It is sometimes an obstinate affection, and is apt to recur after recovery.

The other variety, which may be termed occipital Eczema, occupies chiefly the posterior half of the scalp, and is generally confined to the part covering the occipital bone. This kind, as a rule, is not found associated with Eczema of any other part. It is almost peculiar to children of between the ages of 2 and 16 years, whereas the constitutional variety is common at all periods after the age of 3 months.

The occipital variety is invariably associated with, and depends on, the presence of the pediculus capitis. In the constitutional kind, unless it be associated with the other affection, the pediculus is as constantly absent. The occipital variety, moreover, is always readily to be got rid of, and does not commonly recur; it does not produce thinning of the hair.

The eczematous eruption, caused by the *acarus scabiei*, will be found described under the head of scabies.

Eczema is by far the commonest disease of the skin. It is often found associated with some other cutaneous affection, the eruption in such cases partaking of the characters of either disease. Lichen, impetigo, pityriasis, and psoriasis are the diseases with which it is most frequently conjoined. It follows usually a chronic course, and is very apt to return after recovery. It is attended generally with a sensation of burning and itching, and causes occasionally severe smarting or even aching pains. It is in many cases a constitutional complaint, but sometimes arises solely from parasitic irritation.

Eczema occurs at all ages, but is commoner with the young than with the aged; young children and infants are especially liable to it. It becomes more prevalent at the spring, and again towards the end of the autumn, than it is at other times of the year. Certain avocations, which entail much exposure to the rays of the sun, or to the heat of an

oven, or of a furnace, or which necessitate much handling of gritty or irritating substances, predispose to Eczema. Thus, it is of common occurrence amongst agricultural labourers, metal-founders, blacksmiths, pastry-cooks, bakers, colour-grinders, dyers, metal-workers, and grocers. But, independently of these causes, there is evidently in certain individuals a strong constitutional predisposition to the disease, which in many instances is hereditary.

The exciting causes of Eczema are the process of dentition, excesses of all kinds, the ingestion of shell-fish or of highly-spiced dishes, strong mental emotions, whether of an exciting or a depressing kind, want of sleep, excessive fatigue, prolonged exposure to the direct rays of the sun in hot weather, the contact of irritating plasters, of rancid oil, of strong alkali, of mercurial ointment, or of irritating powders; the irritation set up by the presence of the *acarus scabiei* or the *pediculus capitis*.

In considering the diagnosis of Eczema, the frequency with which it coincides with other affections of the skin must be remembered. Those with which it is most commonly associated have been already mentioned.

The diseases for which it is most likely to be mistaken are lichen, psoriasis (a variety of), erythema, herpes, impetigo, and (foliaceous) pemphigus. In certain situations, too, it may be confounded with pityriasis, erysipelas, bullous pemphigus, or scabies.

But in *lichen*, the quantity of fluid excreted by the affected skin is very small, and the crusts formed by it are minute, dry, and of a greyish colour. The skin, too, is harsh, dry, and thickened; whereas in Eczema it is smooth, moist, and thinned.

In *psoriasis* the incrustations are dry, white, laminated, and nacreous; and the inflamed skin covered by them is somewhat elevated, dry, creased, and of a tawny-red colour. The eruption of psoriasis moreover is usually most developed in the neighbourhood of the knees, elbows, and loins.

Erythema intertrigo may be distinguished by its position

(in some fold of the skin), by the thinness of the discharge, and by the ready disappearance of the eruption under treatment.

Herpes may be diagnosed from Eczema by the larger size of its vesicles: their occurrence in patches of about a dozen or more, clustered on circumscribed inflamed areolæ; and their leaving adherent dry crusts instead of loose moist exfoliations behind them.

In *impetigo* the crusts are much thicker than in Eczema; their surface is nodulated; on detaching them a suppurating surface is disclosed. In its early stage the disease is pustular.

In *foliaceous pemphigus* the eruption is more extensive than it ever is in Eczema. The exfoliations are much larger; the liquid secreted by the inflamed skin is less viscid, and there are generally a few bullæ present to aid the diagnosis.

Eczema of the scalp, under certain conditions, so closely resembles *pityriasis* as to be scarcely distinguishable from it; but in the latter affection the scales are always drier, and more opaque than in the former.

E. rubrum, affecting the face, may be mistaken for *erysipelas*. But the latter affection occupies at its first appearance only a very limited area, generally the bridge of the nose. The swelling ceases suddenly at the margin of the inflamed patch, and in place of a multitude of small vesicles there are one or two irregularly-shaped blebs.

In acute Eczema of the hands: by the union of several vesicles, blebs may be produced sufficiently large to simulate the *bullæ of pemphigus*. But the blebs so formed are often loculated; clusters of vesicles are to be seen in their neighbourhood. They disappear in the course of a few days, and are not succeeded by others; whereas pemphigus is almost always a chronic disease.

Eczema of the hands is sometimes merely a symptom of *scabies*. When this is the case, the eruption is confined chiefly to the interdigital webs, and the lateral surfaces of the first phalanges; whereas, according to the author's

observations, Eczema of constitutional origin attacks the dorsal and palmar rather than the lateral aspect of the fingers; again, the former never affects the last phalanges, the latter often does so. The history of contagion, where this can be made out, and the presence of the acarian furrows, will be further means of identifying scabies.

TREATMENT.—If Eczema be developed under any external influence,—for example, the irritation produced by constantly handling sugar or lime,—the removal of the cause will often alone suffice. In such cases, if the patient be a grocer or builder, it is sometimes necessary that he should change his occupation.

If the eruption be recent, and attended with inflammatory symptoms: after a brisk purge, refrigerants and demulcents, such as cream of tartar, Mindererus spirit, lemonade, sarsaparilla, or couch-grass-tea should be given, at the same time that emollient and sedative applications are employed; for instance, if the eruption be general, tepid baths, containing bran, gelatine, or the mucilage of sea-weed obtained by boiling carragheen-moss or bladder-wrack; or if it be limited to a small area, poultices of ground rice or potato-starch, made with an infusion of henbane or lettuce. In either case, if the surface be abraded, such means should be followed by the application of some bland ointment to prevent desiccation of the macerated surface, for example petroleum-ointment containing a few drops of the liquor plumbi; or, if there be no abrasion, then by a dusting over with powdered starch or lycopodium-powder or fuller's earth or powder of French chalk. Local acute Eczema may often be considerably relieved and reduced by the constant application to it during the daytime of lotion of Goulard's Extract (fl. 3j to the pint), used as an evaporating lotion.

The lotion should be applied on a single layer of "cambric-muslin," the material out of which white pocket-handkerchiefs are made. The layer of cambric should be wetted anew every two minutes. This should be effected not by removing the cambric each time it is wetted, a procedure which would

tend to aggravate the existing inflammation; but by sprinkling the cambric with a few drops of lotion squeezed from a small sponge.

If the eruption be chronic, and the patient of lymphatic temperament, moderate doses (3ij t. d. s.) of cod-liver oil should be given. In long-standing cases of this kind considerable benefit is to be derived from small doses of sulphur, or of the *hepar sulphuris*. In the majority of instances the liquor arsenicalis will be of service. When there is considerable watery discharge, the bowels should be kept loose by a saline aperient. If the patient's health be feeble, he should take steel and bitters, and his diet should be nourishing; but in any case it should be unstimulating, and all condiments and fermented liquors should be interdicted.

Locally various remedies may be made use of, with a view to their exercising either a stimulant, an alterative, an anodyne, an astringent, or an emollient effect on the skin. In a disease which varies so much in its character as Eczema, the success of any plan of treatment will depend greatly on the judicious selection of the local application, and the appropriate adjustment of its strength.

Ointments of diachylon, of the carbonate, or the acetate of lead, of subnitrate of bismuth, of calamine, of the oxide, or the oleate of zinc, of cyanide of potassium, of boracic acid, of salicylic acid, of tannin, of camphor, of iodoform, of calomel, of vermilion, of the red oxide, or the oleate, or the nitrate, or the subiodide of mercury, of chrysophanic acid, of juniper tar, of pine tar, of birch tar: or lotions of borax, of boracic acid, of calamine, of subnitrate of bismuth, of subacetate of lead, of chamomile, of elecampane, of lime, of sulphate of iron, of sulphate of zinc, of sulphate of copper, of alum, of bichloride of mercury, of nitrate of silver, of hydrate of potash, of resorcin, of emulsion of coal tar, of carbolic acid: glyceroles of the subacetate of lead, or of starch and juniper tar: and the plaster of minium and vermilion are the most important topical remedies.

SECTION II.—HERPES.

HERPES is an acute eruption of comparatively large vesicles, which occur in clusters, each cluster being situated on a circumscribed patch of erythematous skin, and separated from neighbouring clusters by intervals of sound skin.

The varieties of Herpes are *H. zoster*, *H. phlyctænodes*, *H. labialis*, *H. præputialis*, *H. circïnatus*, and *H. iris*; of these the two last are parasitic diseases, and will be treated of accordingly with other eruptions of that group.

H. zoster, or *Zona*, is an acute affection, which begins by slight febrile disturbance, a sense of weariness, pain in the loins, and loss of appetite. Then over a limited region sensations of heat, of tingling, or even darting pains may be felt. Shortly, on the region so affected, appear several circumscribed erythematous patches of irregular shape. These are quite distinct from one another, and vary in size from half an inch to three or four inches across.

The general arrangement is such that they form a wavy interrupted band, which is situated generally on the trunk, where it takes a transverse direction, reaching half round the body on one side, usually the right, commencing at the middle line behind, and extending obliquely forwards and a little downwards, as far as the middle line in front.

Shortly after the patches have appeared, they become studded with minute transparent vesicles, of the size of millet-seeds, and averaging in number from half a dozen to a score on each patch. Most of these continue distinct from one another; but some of them, as they increase in size, become joined with others of the same cluster, so as to form large irregular bullæ. Those, however, that remain separate rarely exceed the size of a pea.

In either case they soon cease to be transparent, but, retaining their brilliancy, assume a lustrous opaline appearance. This lasts for a day or two, when, about the fifth day of the eruption, the contained fluid gets turbid and

inspissated, so that the vesicles become dull, flaccid, and opaque, and, at the same time, the erythematous patch on which they are seated begins to fade.

The shrivelled blebs speedily dry up into small brown crusts, which conceal superficial excoriations. The latter soon heal, and the crusts fall off, leaving red stains which gradually fade away.

The number of the groups of Herpes zoster is very variable. The half-belt may either consist of a good many, or be made up of only two or three.

The development of the different clusters is not simultaneous. They appear in succession, so that at any given time, during the progress of the eruption, different patches will exhibit different stages of development or decline. Vesicles of the same cluster, however, always progress *pari passu*.

The course of the disease is usually completed in from ten days to a fortnight. Sometimes, however, it is more protracted :—

Either the vesicles may get accidentally ruptured, and so leave behind them superficial ulcers, which necessarily prolong the disease ;

Or, in the aged or cachectic, a grey slough (*H. gangrenosus*) may form beneath and around the vesicle, and leave, after its separation, a deep, painful ulcer, which may take even several months to heal. This condition of the skin is attended generally with hectic fever and great prostration, and the sores leave behind them permanent scars ;

Or, towards the termination of the eruption more or less severe lancinating neuralgic pains may attack the region occupied by it. These pains are more intense, and are prolonged over a greater length of time in the aged and debilitated than in the young and vigorous. Their duration is usually limited to a few days ; but they may continue for several weeks, months, or even years, after the disappearance of the eruption.

Zona is almost invariably confined to one side of the body, stopping short both behind and before at the median line, which it rarely transgresses.

It has, in a few instances, been observed on both sides of the trunk; but, on these occasions, the two halves of the belt did not correspond, the one being situated considerably above the level of the other. There is a popular notion, which, however, is without the least foundation, that such cases necessarily prove fatal.

The eruption appears usually on the trunk, the lower part of the thorax being its most favourite locality. But it occurs also on the neck, the face, the head, and the upper and lower limbs.

On the limbs its direction is vertical, on the trunk horizontal, and on the neck, face, and head, partly vertical and partly horizontal.

On the trunk the vesicles of *Herpes zoster* are larger than on the head, neck, or limbs.

This variety of *Herpes* occurs at all ages. It is commoner in the summer than in the winter. It follows sometimes on exposure to cold, sometimes on violent fits of passion. At uncertain periods, cases of *H. zoster* get suddenly to be very much commoner than they usually are, and an epidemic of the disease (if it may be called so) prevails.

H. phlyctænodes is a division of *Herpes* that was established on the assumption that the variety just described varied in essential particulars accordingly as it occupied the trunk or other parts: this term comprehended all cases of *H. zoster* occurring elsewhere than on the trunk.

H. labialis occurs, as its name implies, about the lips. In the place where it is about to appear, a sensation of burning and smarting is felt. This is followed slowly by the appearance of a circumscribed red patch, which soon becomes swollen and shining. On this, a cluster of small vesicles is speedily developed. Some of these may unite to form a small, irregular bleb of about the size of a split-pea.

The colourless, transparent vesicles soon become yellow

and opaque, and the burning and smarting sensations subside. The vesicles dry up into small brown crusts, which fall about the seventh or eighth day, leaving red stains, which gradually disappear.

H. labialis appears generally at the junction of the mucous membrane with the skin, but often affects the skin at some little distance from the red margin of the lips. It is common at the angles of the mouth, but it may be situated over any part either of the upper or lower lip. Sometimes it forms a complete circle round the mouth.

It occasionally appears on the mucous membrane lining the buccal cavity. In this situation the vesicles soon rupture, and are replaced by little white patches of macerated epithelium.

This variety of Herpes sometimes occurs as an independent complaint, affecting the lining membrane of the mouth and fauces, as well as the exterior of the lips, and attended with slight febrile disturbance. But ordinarily, it is an accessory to and appears in the course of other diseases, such as catarrh, ague, continued fever.

H. præputialis may affect either the outer or inner surface of the prepuce, appearing in the form of small red patches. Each of these is about the size of a fourpenny-piece, is perfectly distinct from the others, and soon becomes covered with a crop of transparent, globular vesicles.

The eruption is preceded and accompanied by itching, heat, and, sometimes, smarting of the prepuce.

When it affects the outer surface of the foreskin, the vesicles soon become opaque, shrivel, and are replaced by small crusts, which fall about the seventh or eighth day.

On the inner surface of the prepuce the affection is attended with more irritation, and the patches are redder. The vesicles, which soon burst, are replaced by little superficial ulcerations that speedily heal. Sometimes, however, in this situation, the disease is kept up by a succession of eruptions, and assumes a chronic character; the end of the prepuce becomes thickened, wrinkled, and even fissured,

and at the same time, the margin of its orifice gets gradually contracted and converted into a ring of almost cartilaginous hardness.

H. præputialis is almost peculiar to adults. It is often associated with stricture of the urethra; by some authors of weight, however, this is regarded as a mere coincidence.

Herpes, although a tolerably distinct disease, is, nevertheless, liable to be confounded with certain other eruptions. Thus, H. zoster may be mistaken for erysipelas, eczema, or pemphigus; H. labialis, for eczema; and H. præputialis, for primary syphilis.

However, in *bulbous erysipelas*, the inflamed areola is generally much more extensive than in *Zona*; the blebs are much less numerous and a good deal larger. They are, moreover, irregular in shape, and the margin of the erysipelatous surface is distinctly raised.

In *eczema*, although that disease may occur in patches, yet the patches have neither the well-defined margins, nor the systematic arrangement of *Zona*; again, the vesicles of eczema are smaller and much more crowded together than those of Herpes.

The isolation and the volume of the vesicles of Herpes may cause it to be mistaken for *pemphigus*. But in the latter, although the bullæ may be small and near to one another, they are never arranged in systematic groups. *Zona* is an acute, pemphigus almost always a chronic disease.

From H. labialis, *eczema* may be readily distinguished by the absence of a definite margin, and the minuteness and agglomeration of the vesicles.

H. præputialis is very liable to be mistaken for *chancre*, but the former disease begins from a cluster of vesicles; the latter is, almost from the commencement, an ulcer. Later, the herpetic scales on the outside of the prepuce can scarcely be confounded with the black, thick crusts of syphilis, nor the herpetic excoriations of the inner prepuce for the chancreous ulcer, which is lined with an adhesive, yellowish-white exudation, and, however shallow, has always elevated, abrupt edges.

TREATMENT.—*H. zoster*, when it runs its usual favourable course, requires but little treatment.

If there be much febrile disturbance at the commencement, diluent drinks should be given and a light diet enjoined; the bowels should be regulated, if necessary, with mild aperients, and (if the eruption be considerable) the patient should be directed to remain quiet.

In the employment of local remedies, some caution should be exercised, since applications that would seem to be indicated by the acute inflammation of the skin, such as poultices, fomentations, and emollient lotions, macerate the walls of the vesicles, facilitate their rupture, and so, as has been seen, not only prolong the course of the disease, but add considerably to the discomfort attending it.

The best lotion (if a lotion be used) is a solution of the acetate of lead. But it will be better to oil the surface with almond or olive oil, or to dredge it over lightly with starch-powder; either of these plans is very efficacious in protecting the vesicles from rupture, and, in an uncomplicated case, to preserve them unruptured is the main object in view.

When the vesicles have dried up, a few warm baths may be taken to facilitate the separation of the crusts.

Should the vesicles become accidentally ruptured, the ulcers should be dressed with Ung. plumbi subacet. or (if painful) with an ointment made with moist extract of opium (a drachm to the ounce and a half of simple ointment).

When the disease occurs in old or cachectic persons, their general health should be attended to. In the gangrenous form, such tonics as bark or quinine, stimulants, and a nutritious diet should be prescribed; locally, stimulating lotions, or dusting the surface over with sulphate of quinine, are the best remedies.

When the eruption is complicated with neuralgic pains, an ointment of belladonna- or aconite-liniment, containing to the ounce half a drachm of the former, or two drachms of the latter, may be employed locally, while the tincture of either of these plants is given internally.

If there be much anæmia, the milder preparations of iron in small doses will be of service in relieving the pain. When the eruption has altogether disappeared, the application of blisters, and dusting the blistered surfaces over with small quantities of morphia, will often succeed in arresting the neuralgia. The hypodermic injection of a neutral solution of a salt of morphia gives speedy, and often complete relief. The thermic hammer, the Linimentum chloroformi et belladonnæ, and in desperate cases section of the affected nerve, are also valuable resources.

H. labialis is always a trivial affair, and requires scarcely any treatment. The application of such liquids as lead-lotion, containing a little proof-spirit: glycerine: or a mixture of a drachm of the Liquor plumbi diacetatis, with an ounce of fresh cream, is all that is necessary.

H. præputialis, if acute, needs only the simplest treatment. When situated on the outside of the prepuce, it requires chiefly protection from the friction of the dress. When the inner surface of the foreskin is affected, the urine should be rendered bland and unirritating by the administration of diluents and demulcents, and a piece of dry lint be introduced between the glans and the prepuce to prevent contact of their surfaces, and to absorb irritating secretions. If there be much irritation, emollient lotions should be injected carefully beneath the prepuce, and the penis be bathed frequently in warm water.

In the chronic affection citrine ointment or carbonate-of-zinc ointment is requisite, and Plummer's pill or the alkaline sulphurets should be administered internally. When the præputial orifice has got much contracted, operative interference becomes necessary.

CHAPTER V.

PUSTULÆ.

THE pustular eruptions consist of small hemispherical elevations of the cuticle, which contain, even when recent, an opaque, yellowish-white, mattery fluid.

The pustular eruptions are Ecthyma and Impetigo.

Ecthyma is distinguished by an eruption of large, rounded, discrete, flattened pustules, each of which rests on an inflamed base, and gives rise to the formation of a dark-coloured, adherent crust.

Impetigo is an eruption of minute pustules set closely together, which produce thick, moist, yellowish scabs.

SECTION I.—ECTHYMA.

ECTHYMA may follow either an acute or a chronic course.

Acute Ecthyma is preceded by more or less feverishness, and (usually) by tingling, pricking, or smarting of the surface about to be affected.

The eruption, which is confined to a limited area, appears at first in the form of elevated, rounded, red patches, of the average size of a pea, and distinct from one another. These patches become speedily changed into lenticular pustules of corresponding size, surrounded by red areolæ. After a few days the pustules dry up, and are replaced by hard, dark-coloured, thick crusts, which on separating disclose dusky-red stains, which may last for a considerable time. Gene-

rally several crops of pustules appear during the course of the eruption, which extends usually over about ten days or a fortnight.

This variety is seen more commonly on the limbs and neck than on the trunk or head. It is attended sometimes with considerable inflammation of the surrounding skin and of the neighbouring lymphatic glands, and not unfrequently is complicated with furunculi. This is the commonest variety of Ecthyma, and hence was called by Willan *E. vulgare*.

Chronic Ecthyma differs from the acute variety, not only in duration, but also in extent. The later crops of pustules, instead of occupying the same region as their predecessors, invade successively fresh portions of the skin. Again, the febrile disturbance, which is associated with the eruption, instead of commencing a few hours before, and subsiding a few days after the appearance of the latter, assumes a hectic type, and becomes gradually more marked as the eruption progresses.

This variety sometimes affects infants at the breast (*E. infantile*), who are reared under unfavourable hygienic circumstances. In infants it attacks chiefly the regions which are most exempt from the acute variety, viz. the face and chest. It is a serious affection, since it is apt to become complicated with diarrhoea and copious sweating, and so, in a large proportion of cases, terminates fatally.

Chronic Ecthyma occurs also in adults whose vitality has been lowered by dissipation, grief, privation, or old age (*E. cachecticum*). In this variety the pustules are larger and flatter, as well as more flaccid, than in either of the preceding. They are surrounded by a livid-red areola, and contain a dark-coloured sanious pus. They are replaced by hard, flat, black crusts, from beneath which a dirty ill-smelling discharge exudes. On detaching one of these crusts, a pale flabby ulcer is disclosed.

E. cachecticum affects especially the lower limbs. It may last indefinitely.

A predisposition to Ecthyma is fostered by dirt, poverty, hunger, exposure to cold and moisture, prolonged mental excitement, excessive bodily fatigue, drunkenness, debauchery, watchfulness. The disease is, consequently, commoner with the poor, the aged, and the dissipated. It sometimes follows an attack of specific fever, *e.g.* scarlet-fever, measles, typhoid fever.

But, independently of these causes, it may be excited by the contact of local irritants, *e.g.* tartar-emeti, sugar, lime, iron-filings. Thus it is often seen on the hands and forearms of grocers, bricklayers, and workers in metal. There is another local irritant to which a large proportion of the cases of Ecthyma are due, viz. the *acarus scabiei*. People in whom Ecthyma may thus be excited by mere local irritation are, as a rule, of the lymphatic temperament.

When Ecthyma has been produced by local irritation, speedy and complete recovery may be expected to follow on the adoption of suitable treatment. So also with idiopathic acute Ecthyma, at least in the majority of cases. In the cachectic variety the prognosis should be guarded, and in infantile Ecthyma a fatal result is to be apprehended.

The diseases with which Ecthyma is most likely to be confounded are rupia, impetigo, acne, furunculi, and pustular syphilides.

Between *rupia* and Ecthyma there is certainly a great analogy, and some authors of repute have classed them under one name. But in *rupia* the elevation of the epidermis is broader, and the contents of the bleb, when recent, are serous. Again, the crusts of *rupia* are stratified, and are always decidedly thicker at the centre than at the circumference.

In *impetigo* the pustules are much smaller and much more numerous. They are clustered together, and are often confluent. The crusts are more uneven, are lighter coloured, softer and moister, as well as more extensive than those of Ecthyma.

In *acne* the pustules, which are small and acuminate,

rest generally on a non-suppurating, elevated, indurated base. They are confined to the face, shoulders, or chest.

From the *pustular syphilide*, which is an occasional variety of infantile syphilis, infantile Ecthyma may be distinguished by the absence of mucous tubercules.

In *syphilitic rupia* the coppery areola around the bleb, the greenish tint of the crust, the deep ulcer it covers, the long course run by each bleb, and the general history of the case, will serve for differential diagnosis.

TREATMENT.—*Acute Ecthyma* requires only very simple treatment. Refrigerant drinks, slight laxatives, and local emollient baths, comprise all that is necessary.

In *chronic Ecthyma* it is of the first importance to remove the patient from the operation of the causes which have depraved his health.

In infantile Ecthyma a good wet-nurse is often essential to recovery. Scrupulous cleanliness, pure air, and regular repose, are of scarcely less importance. Cod-liver oil, and bark and ammonia, should be given internally, and the condition of the bowels should be carefully regulated. The sound, as well as the affected skin, should be powdered with a mixture of sulphate of quinine and lycopodium.

In cachectic Ecthyma change of air, especially removal to some suitable part of the sea-coast, light animal food, fresh (cooked) vegetables, and a moderate allowance of alcoholic stimuli should be enjoined. At first, small doses of opium (gr. $\frac{1}{4}$ ter quotidie) will be found of service; afterwards, ammonia, valerian, bark, quinine, and the preparations of iron should be employed. The local applications should be stimulating, and the dressings should be as light and simple as possible. All relaxing applications, such as water-dressing covered with oil-silk, poultices, and, above all, plasters, should be avoided.

SECTION II.—IMPETIGO.

IMPETIGO begins as an eruption of numerous minute yellowish pustules, of the size of a pin's head, or that of a millet-seed, closely clustered together on a more or less reddened portion of skin. In a day or two the pustules burst, and their opaque viscous contents escape and dry up into a yellowish crust, from beneath the edges of which a purulent discharge exudes.

Since it is in this latter condition that the disease generally comes under observation, it is of more importance, for the purposes of diagnosis, to be acquainted with the characters of the scab than of the pustules which produce it.

The scabs of Impetigo form moist, yellowish, thick patches. Their surface is uneven, and often nodulated. Their colour is a dull yellow, tinged often with green or brown. When a crust has lasted for some time, its surface becomes slightly lamellated, so as to give it a somewhat flaky appearance. When the disease is spreading, fresh pustules may be seen around the edge of the crust. On removing a portion of a crust, a raw, moist suppurating surface of a pale pink colour is disclosed.

The principal varieties of Impetigo are *I. figurata* and *I. sparsa*.

In *I. figurata* a large number of pustules, crowded together on a limited surface, give rise to a circumscribed patch of the disease.

In *I. sparsa* the pustules are scattered over a large extent of surface in small groups.

When *I. figurata* occurs on the whiskers, moustache, or beard, it is termed *I. sycosiformis*, from its resemblance to sycosis. When it affects other portions of the face, it is called *I. larvalis* (larva, a mask).

I. sparsa, of the hairy scalp, when it produces small, thick, dry, brownish scabs, is termed *I. granulata*.

When the disease partakes of the character of *I. figurata*, as regards the crowding of the pustules, but resembles *I. sparsa* in the extent of surface covered, so that *e.g.* the whole of the forearm, or the whole of the leg, becomes encased in a scab, it is called *I. scabida*.

Impetigo is rarely preceded or attended with any febrile disturbance, or with any kind of local sensation. It occurs most commonly in children, affecting especially children of lymphatic temperament. When it occurs in adults, it happens most frequently to the obese and flabby, or to those of broken-down constitution.

It is in a large proportion of cases a constitutional disease, but it is not uncommonly a mere phase of scabies. Very many of the cases of Impetigo of the scalp occurring in children are, according to the author's researches, entirely dependent on the irritation set up by the pediculus capitis; in such cases, the occipital part of the scalp is almost invariably the part chiefly affected; the sincipital part of the scalp being almost, if not altogether, free from eruption: he has found the converse to be the rule in cases of constitutional Impetigo affecting the scalp. Again, the former appears most commonly as *I. granulata*, whereas the latter assumes usually the characters of *I. figurata*.

The causes of Impetigo may be thus enumerated—the lymphatic temperament, hereditary transmission, dentition, impaired health, the seasons of spring and autumn, exposure of the skin to the contact of certain irritating substances (sugar, lime, metal-filings), or of irritating secretions. The irritation produced by linseed poultices, or by certain parasites of the skin, viz., the *Acarus scabiei*, the *Pediculus capitis*, the *Achorion Schönleinii*.

An acute attack of Impetigo lasts usually two or three weeks. In the chronic state the eruption may last several months. After recovery, the disease is apt to recur. It is in scrofulous persons that it assumes its most chronic and obstinate phase, and is most apt to reappear.

The diseases for which Impetigo is liable to be mistaken

are eczema, ecthyma, sycosis, tinea favosa, pustular lupus, and "syphilitic rupia."

But in *eczema* the discharge is transparent, the scales are thin and lamellar, and in the early stage vesicles take the place of pustules. Notwithstanding these differences, however, there is between eczema and Impetigo a very close analogy.

In *ecthyma* the pustules are large, few in number, and discrete, and the crusts small and dark-coloured.

From *sycosis* I. sycosiformis may be distinguished by the lack of subcutaneous inflammation and induration, by the absence of fungous ulcers, by the absence of a cryptogamous growth in the root-sheaths of the hairs, and by the disease not producing, unless it be of *very* long standing, local alopecia.

From *tinea favosa* Impetigo of the scalp may be distinguished by the fact that, although the latter often produces more or less thinning of the hair, it never leads to extensive alopecia. Again, its dull brownish-yellow crusts have but little resemblance to the bright sulphur-coloured cup-shaped incrustations of favus.

The absence of deep ulceration and of subsequent cicatrices will distinguish Impetigo from *pustular lupus*, and from "*syphilitic rupia*."

TREATMENT.—In *acute Impetigo* the diet should be restricted, laxative and refrigerant medicines should be administered, and the local applications should be emollients, such as warm decoctions of marsh-mallow, or of poppies infusion of linseed, or almond-mixture, or poultices of bread or of ground rice, followed by light dressings of oxide of zinc ointment or of acetate of lead ointment, or of glycerole of the subacetate of lead duly diluted with glycerine.

In *chronic Impetigo* the most efficient internal remedies are cod-liver oil, the various preparations of iron, bitter tonics, the sulphurous mineral waters, and occasional laxatives.

Externally, ointments of precipitated sulphur, of the nitrate, the oxide, or the bichloride of mercury, or the huile

de cade, or lotions of alum, tannin, chloride of zinc, or hepar sulphuris, are the best applications.

When the purulent discharge is thin and profuse, a mixture of tannin and starch in suitable portions should be dusted over the part. Another excellent application for the same condition is a mixture of iodoform (in very fine powder) and of starch powder in equal parts.

In the local treatment of Impetigo it is always essential that the scabs should first be softened, by bathing them with warm soap-and-water, and then completely detached and removed; after which the raw surface should be gently dabbed dry. When powders are employed as a dressing, they should be freely dusted on, and thereupon the powdered-over surface should be coated with a film of glycerine, laid lightly on with a camel-hair brush.

In all cases of Impetigo of the scalp the head should be shaved, or at least the hair should be cut close. When the occipital region of the scalp is the part chiefly affected, the application of ammonio-chloride of mercury ointment should form a part of the treatment.

CHAPTER VI.

BULLÆ.

BULLÆ are large portions of the cuticle detached from the skin by the interposition of a watery fluid, transparent or turbid; they differ from *vesiculæ* or *pustulæ* only in size.

The bullous eruptions are *Pemphigus* and *Rupia*.

Pemphigus is a disease characterized by the development of a greater or less number of clear, prominent, watery blebs on inflamed red surfaces. These little bladders being readily ruptured, give rise at first to excoriations, and afterwards, by the concretion of their liquid contents, to thin crusts.

Rupia is an eruption of large, flat, discrete bullæ, which contain at first a serous and afterwards a purulent fluid, and which produce dark crusts thicker at the centre than at the circumference, covering shallow ulcers.

SECTION I.—PEMPHIGUS.

PEMPHIGUS may follow either an acute or a chronic course.

ACUTE (a much rarer affection than chronic) **PEMPHIGUS** is of three kinds.

In the one (*P. solitarius*), an extremely rare variety, which is seen only in old persons, there appears, usually on the shank, a single bulla of about the size of a nut; this rapidly increases in size; when fully formed it produces a painful

feeling of tension. After remaining stationary for a day or two the bulla becomes flaccid, and at the expiration of a week disappears. A second and sometimes a third bulla may appear near the situation of the first. The appearance of each bleb is preceded by a sensation of burning and itching, and sometimes by redness of the spot.

In another variety (*Acute general Pemphigus*), less rare than the preceding, the eruption, preceded for a day or two by febrile disturbance, appears in the form of small, circular, rose-red patches. In the course of a few hours the centre of each patch becomes opalescent and somewhat raised, and in a short time a transparent bleb surrounded by an erythematous ring is developed. In a few days the bulla attains its full growth. Its production is accompanied by itching and tingling. Its manner of disappearing is not in all cases the same. In some instances the serum is gradually reabsorbed, so that the bulla shrivels and is replaced by a dry foliaceous desquamation; but more commonly the bleb bursts and the serum escapes, disclosing a more or less extensive excoriation. This may either get covered by a thin, dark-coloured crust, which after a time falls off, or the epidermis becomes reapplied to the excoriated surface, which heals under it. In either case a violet stain is left, which may last for some time. The duration of each bulla is about a week; but by a succession of several crops of bullæ the disease is generally prolonged for about three weeks or a month.

The remaining variety of acute Pemphigus (*P. neonatorum*) is peculiar to new-born infants, and affects only the palms of the hands and soles of the feet. The blebs, which contain a transparent yellow serum, vary in size from that of a pea to that of a small bean; each of them is encircled with a dusky, violet-coloured areola. They soon rupture, and get replaced by superficial ulcers, which become covered by thin black crusts. The ulcers spread by the formation of fresh bullæ.

This variety is supposed by some authors of weight to be

a form of infantile syphilis. It is accompanied with diarrhoea and marasmus, and is apt to terminate fatally.

CHRONIC PEMPHIGUS in its ordinary form may either succeed to acute general Pemphigus, or may from the first maintain a chronic character. It differs from the latter disease in being preceded by only slight febrile disturbance, in the absence of a red areola around the bullæ, which, moreover, are less tense and transparent than in the acute variety, and in the more chronic character of the ulcers left after the blebs. It resembles the acute disease in producing a succession of crops of bullæ; these may follow one another at intervals of only a few days, or may be separated by such a pause as to induce the belief that permanent recovery has taken place. When so long a term intervenes, the succeeding crop assumes much of the character of an acute attack.

Sometimes the variety just described may lead to another more serious condition (*foliaceous Pemphigus*). The bullæ increase in number, become confluent, and appear in quicker succession, till at last they become so crowded and succeed one another so rapidly that they are unable to go through the usual phases. They have scarcely formed when they rupture, and leave the surface covered with little lamellar crusts, which resemble pretty closely in colour, consistence, and thinness, the layers of a piece of light pastry. These flakes, which adhere but loosely to the skin, being curled up much in the same way as the loose bark of a sycamore-tree, are readily detached and as readily reproduced. The skin itself is moist, exuding a fetid, nauseating, serous discharge. This foliaceous condition of the skin is apt to invade the whole surface: when this happens the disease may terminate fatally.

Pemphigus, although a comparatively rare, is always a grave affection:—in the acute form, on account of its tendency to recur, and finally to pass into the chronic state: and in the chronic form, on account of the debility and emaciation that are induced by it. Pemphigus may occur at any age,

and may appear at any part of the surface. In the chronic condition it is apt to be complicated with obstinate diarrhoea. It is sometimes attended with severe itching (*pruriginous Pemphigus*).

The causes that are assigned to Pemphigus are:—exposure to cold and moisture, bad or insufficient food, mental distress, (rarely) pregnancy. The debility that is associated with chronic Pemphigus is sometimes the cause and sometimes the effect of the disease.

Pemphigus may be mistaken for herpes zoster, rupia, ecthyma, impetigo, or erysipelas.

Herpes zoster may be distinguished by its tendency to form a half-zone round the trunk, by the smaller size of its blebs, which rarely exceeds that of a pea, and by the severe neuralgic pain that often accompanies it.

In *rupia* the bullæ are fewer in number, are flatter, and are less commonly arranged in groups than those of Pemphigus. The crusts, too, are thicker, and are conical, and rest upon actual ulcers.

In *ecthyma* the liquid that raises the epidermis is always purulent, and the crusts are black and thick.

The crusts of *impetigo* may always be distinguished from those of Pemphigus by their greater thickness, their yellow colour, and their brittleness.

In *erysipelas*, the blebs are irregular in outline, and are flatter; and the intervening skin is shining, swollen, and inflamed.

TREATMENT.—Acute general Pemphigus should be treated by diluent drinks, by laxatives, and by emollient applications. Care should be taken to avoid rupturing the bullæ; or, should they have burst, to prevent the epidermis getting rubbed off from the raw surface protected by it; with this view rest should be enjoined, and the affected skin may be dusted over with violet-powder. Any raw surface should be dressed with some soothing and gently-astringent ointment, *e.g.* the ung. zinci oxid.

P. neonatorum, P. solitarius, and chronic Pemphigus, all

require the same general treatment: viz. a generous diet, a moderate allowance of wine, tonics (quinine, iron, arsenic), and small opiates.

As regards their local treatment, the blebs, unless of considerable size, should not be punctured. The raw surface left, after the rupture of a bleb, should be dressed with ointment or lotion of the acetate of lead; or, if the raw surface exhibit a tendency to take on a chronic condition, with a lotion of the nitrate of silver. When there is much tenderness or pain, the ung. gallæ c. opio is an excellent application.

SECTION II.—RUPIA.

RUPIA, in its mildest form (*R. simplex*), appears in the shape of small, rounded, but flat blebs, the diameters of which vary from that of a threepenny-piece to that of a shilling. These are moderately distended by a thin, opalescent, serous liquid, which soon gets purulent, and at the same time inspissated, so that the blebs become flaccid, and finally dry up into uneven brown crusts, which are thicker at the centre than at the circumference. These crusts are readily detached, and leave superficial indolent ulcers, which finally cicatrize, leaving behind them livid red stains, which may persist for some time. While these changes are taking place in the first crop, fresh crops of bullæ continue to be formed, which follow the same course—the disease lasting altogether about a fortnight or three weeks. This variety approaches very closely in its characters to ecthyma, and is considered by several authors of repute to be identical with it.

In a severer form (*R. prominens*) the disease commences as small, rounded, inflamed spots, on which bullæ become speedily developed; the serum contained in these is often dark-coloured and sanious, and is usually of thicker consistence than in the preceding variety. The blebs are

replaced by thick dark-coloured crusts, which are surrounded by a dusky erythematous areola. This areola soon becomes converted into an annular purulent bleb, which in its turn becomes converted into a scab. In this manner the crust, by successive additions at its circumference and under-surface, acquires a conical shape. In some cases, the growth at the under-surface makes greater progress than that at the circumference, and the crust acquires the appearance of a limpet-shell. In others, the growth at the circumference is the more rapid; and then the crust is flatter, and has much of the form, as well as the laminated appearance, of an oyster-shell. In either case, the crusts are generally dry, hard, dark-coloured, and pretty adherent, so as to acquire often a considerable thickness: if one of them be detached, a pale ragged ulcer is disclosed, which bleeds on the slightest touch, and is deep in proportion to the age of the crust. The ulcer slowly cicatrizes, and leaves a purplish stain, which remains for some time.

R. escharotica is a variety still more severe. It attacks sickly infants, commencing by livid-red patches, on which bullæ, containing a dark sanious fluid, become developed. The bullæ spread, and, instead of forming crusts, produce open, foul, ragged sores, with livid raised edges. These sores are very slow to heal, and are moreover extremely painful, so as to prevent rest. They are generally attended with fever. Several of them appear in succession.

Rupia attacks preferably the loins, nates, and lower limbs; but occurs also on other parts of the body. It may appear at any period of life, but is commoner in childhood and old age.

A predisposition to Rupia is fostered by such causes as insufficiency or unwholesomeness of diet, poverty, dirt, privation of all kinds, a damp habitation, an unhealthy atmosphere, drunkenness. The disease is sometimes occasioned by a recent attack of scarlatina, or of small-pox.

With the exception of *R. escharotica*, Rupia is not in itself dangerous to life. When death occurs in the course

of it, the result is due to the general state of health which caused the disease, and not to the disease itself. Recovery, however, is always slow.

Rupia is liable to be mistaken for ecthyma, "syphilitic rupia," and pemphigus.

But in *ecthyma* (although it originates in similar causes, and bears a considerable resemblance to rupia,) the crusts have not the conical formation,—nor are they accompanied by the decided ulceration, produced by the latter disease.

Syphilitic rupia, again, closely resembles "simple" Rupia; but its crusts are even darker and harder, and have often a greenish tinge. They conceal much deeper ulcers, the floors of which are covered with a grey pultaceous substance, and the edges of which are perpendicular. The areolæ around them are coppery instead of livid, and there are always other syphilitic symptoms to aid the diagnosis.

TREATMENT.—It is of the greatest importance to improve the patient's general health, and to remove the causes which have depraved it. Light, easily-assimilable animal food, and fresh vegetables, an occasional laxative, small opiates, bitter tonics, chalybeates, good malt liquors, wines, cod-liver oil, and mineral acids, are the most important internal remedies.

Externally, tepid, alkaline, or sea-water baths, and gently-stimulating local applications, aided by an occasional pencilling with nitrate of silver, are useful.

When the legs are affected with Rupia, the recumbent posture, the legs being slightly raised, greatly facilitates recovery.

In obstinate cases a sea-voyage is much to be recommended.

In *R. escharotica*, to support the strength and allay pain, and locally to employ anodynes, antiseptics, and emollients, are the chief maxims.

CHAPTER VII.

TUBERCULA.

TUBERCULA are small, hard, indolent, superficial tumours, either permanent or proceeding slowly to ulceration.

The tuberculous eruptions are, Lupus, Cheloid, and Verruca.

Lupus is an extremely chronic eruption, affecting young persons; associated with the lymphatic temperament, and often with scrofula; characterized at first by purplish redness and more or less swelling of the affected skin; and terminating in the formation of a permanent cicatrix with or without previous ulceration.

Cheloid is a small, indolent, persistent tumour developed in the thickness of the skin. It may be either pale, shining, oval, and flattened; or red, wrinkled, elongated, and prominent.

Verruæ, or warts, are little tumours of the skin, varying from the sixteenth to the eighth of an inch in height, which consist of a greater or less number of the natural papillæ of the skin greatly hypertrophied, and imbedded in a mass of thickened cuticle.

SECTION I.—LUPUS.

LUPUS is met with most frequently on the face, affecting usually the nose or the cheek. But it occurs also on other parts of the body.

There are three varieties of this disease; viz. the erythematous, the pustular, and the tubercular.

Erythematous Lupus commences as a rounded, slightly elevated, shining, lakish-red patch, not larger than a four-penny-piece. On this, after a while, desquamation takes place; the scales that appear are white and opaque, and are arranged often in thin, curved, wavy bands, which adhere firmly to the skin beneath. The patch spreads very slowly at the circumference, while the centre heals and becomes a thin, polished, slightly depressed, white, indelible scar. This cicatrization takes place without any preceding ulceration, and is the effect of interstitial absorption.

Pustular Lupus begins, like the preceding variety, as a somewhat raised, lakish, or livid patch. On this shortly appear a few minute pustules of the size of a pin's head, or, in some cases, one or two rupial blebs of the size of a split-pea. After about a week's duration, they rupture and exude a plastic liquid, which concretes into a white, a yellowish, or a dark-brown crust. This crust, like the scales of the erythematous variety, adheres pretty firmly to the skin beneath. On detaching it with the finger-nail, it is seen to cover a ragged, shallow ulcer, the floor of which is formed of pale, pink, flabby granulations. Around the crust the disease slowly spreads by the extension of the livid elevation and the formation of fresh pustules or mattery blebs, which, in their turn, give place to crusts; while, after a certain time, the crusts at the centre fall off and disclose a white cicatrix, which is more depressed, more opaque, thicker, and more uneven than the scar of the preceding variety.

Tubercular Lupus, at its commencement, occurs as a cluster of about half a dozen small, rounded, dusky red, soft, elastic elevations, of a size varying from that of a hemp-seed to that of a pea: they may be either distinct from one another or agglomerated. They are generally accompanied with more or less infiltration of the cellular tissue beneath and around them (*Lupus hypertrophicus*). This is some-

times so considerable as to cause the disease to resemble erysipelas.

The patch slowly extends by the formation of fresh tubercles around the original cluster.

Tubercular Lupus may follow either of the following courses:—

It may terminate in cicatrization without previous ulceration;

Or superficial ulceration may take place, as in the case of pustular Lupus;

Or deep ulcers may be formed (*Lupus exedens*). The cicatrix left by these when they have healed is thicker, more opaque, and more uneven than that of any of the preceding varieties. It resembles very closely the puckered scar of a severe burn, and has the same property of gradually but rigidly contracting, so as to occasion the most serious deformities;

Or (lastly) the granulations that form the floor of the ulcers, produced either by pustular or tubercular Lupus, may become firm, hard, and dry, and acquire a thick, tough layer of epithelium (*warty Lupus*). This (warty) condition is succeeded, like all the varieties of Lupus, by a permanent scar, with or without previous ulceration.

Lupus, in any of its forms, is a comparatively rare disease. It is, as a rule, unattended either with itching or "burning."

The predisposing causes of Lupus are, the lymphatic temperament, the scrofulous diathesis, childhood, the female sex, hereditary transmission, unhealthy habitation, unwholesome or insufficient food, a moist atmosphere, confinement.

The disease may be excited in persons who are predisposed to it, by sudden alternations of heat and cold, or by local irritation of various kinds.

Of the causes above enumerated, the most active are, temperament, diathesis, and age. Lupus may be said to have invariably associated with it a lymphatic temperament;

and it is evidently closely allied to, if not identical with, scrofula. Although, owing to the great length of time over which its course extends, it happens to be met with in middle-aged and even in elderly persons, yet its *first* appearance dates, in most cases, from childhood, and it is extremely rare for it to appear after adult age has been attained.

Although Lupus in no way endangers the life or even the health of the subject of it, and may even, in cases of long standing, coincide with excellent general health; yet its proneness to attack the face, the ravages that, if unchecked, it commits there, its tenacity when it has once gained a footing, and its obstinacy under treatment, render it a very serious affection. When it attacks the eyelids, it is apt to affect both the outer and the inner (conjunctival) surface of the lid; and, in such case, if the disease happen to be other than of the most superficial kind, it meets from opposite surfaces in the cartilage of the lid, and the result is the total destruction of the lid, a constant flow of tears over the cheek, and the establishment of obstinate granular ophthalmia, followed sometimes by opacity and ulceration of the cornea, staphyloma, and irremediable loss of vision.

When the nose is affected, the same kind of result is apt to ensue; the disease creeps equally up the mucous and the cutaneous surface of the nostrils, and the result is often the total destruction of the cartilaginous portion of the nose.

So, again, when the disease attacks the mouth, the face is apt to become much deformed by the disappearance of a greater or less portion of one or other of the lips.

The pinna of the ear is apt to suffer in the same way.

But it is not necessary that the disease should attack some one of the above-mentioned parts in order to produce considerable deformity. Even when the cheek only is affected, if the ulceration have extended at all deeply, the gradual but irresistible contraction of the scar that is produced draws down and everts the lower eyelid of that side, so that the

eye can no longer be completely closed; but besides this, the scar occasions considerable distortion by drawing up the skin from other directions as well.

The prognosis, both as regards the extent of deformity likely to be produced, and the prospect of speedy recovery, will be far more favourable in the exanthematous variety, and in cases of tubercular Lupus which exhibit a disposition to cicatrize without ulceration taking place, than in cases either of tubercular or pustular Lupus in which ulceration has taken place. The existence of much puffy infiltration of the subjacent cellular tissue is to be regarded as an unfavourable prognostic symptom. The longer the disease has already lasted, and the more pronounced the scrofulous appearance of the patient, the more unfavourable will be the prognosis. The most prolonged case of Lupus the author has met with was in a lady a little over fifty years of age, who had been affected with the disease ever since she was three months old. It is common for Lupus to endure for ten or a dozen years.

Lupus is liable to be mistaken for various diseases; thus,—

Erythematous Lupus may be mistaken for erythema papulatum, for pityriasis, for psoriasis, for herpes circinatus, or for a syphilide.

Pustular Lupus may be taken for impetigo.

Tubercular Lupus, in its earliest stages, may be confounded with tubercular syphilide, especially with the clustered, non-ulcerating kind.

In the ulcerated condition either pustular or tubercular Lupus may be confounded with an ulcerating tertiary syphilide, or with an ulcerating epithelial cancer.

But in *pityriasis* the skin is rough, the scurf is branlike, and not firmly adherent to the reddened surface; and there is usually itching.

In *psoriasis* the scales are nacreous, are thicker, are stratified; the skin is harsh, or, if smooth (eczematous psoriasis), is moist. The patches are usually numerous and widely

spread ; and if the eruption appear on the face, the eyebrows are generally chiefly affected. If the patches of psoriasis be ringed, there will be no cicatrix in the centre of the ring. Whether of the ringed or of the nummular kind, psoriasis usually occasions itching.

In *herpes circinatus* the reddened skin is of a pink colour, and is rough and harsh (is far from being shining). The patches increase rapidly, and there are generally several of them. The centre of each of the patches, although less raised and somewhat paler than the circumference, offers no resemblance to a cicatrix.

From any similar *syphilitic* patch erythematous Lupus may be distinguished by its limited extent, the extreme slowness of its progress, and the absence of any other signs of constitutional syphilis.

Impetigo progresses far more rapidly than pustular Lupus. The duration of its pustules is much briefer ; the crust that succeeds to them is of a lighter colour and softer consistence, and is less firmly adherent to the skin beneath it. The surface covered by the crust is not an ulcer. The eruption is usually more extensive, and less abruptly defined.

In the *tubercular syphilide* the tubercles are firmer and tawnier, and begin to ulcerate much sooner than those of Lupus. There is no puffy infiltration of the cellular tissue beneath and around them ; and there are usually with them other symptoms of constitutional syphilis.

The *tertiary syphilitic ulcer* has unbroken perpendicular walls, as if it had been cut out with a punch ; it has a grey slough-like floor, and is, moreover, surrounded by a coppery-red areola. Whereas the ulcer of Lupus has irregular, scoloped walls, which are often undermined, so that they overhang the circumference of the floor of the ulcer. The floor of the ulcer of Lupus is composed of pale-pink flabby granulations, and its margin is surrounded by a purple-red areola.

The *epithelial cancer* commences usually in old age. The ulcer produced by it is elevated at its circumference very

considerably above the level of the surrounding skin, and this raised circumferential portion of the ulcer is distinctly lobulated.

TREATMENT.—The treatment of Lupus should include hygienic measures, general treatment, and local applications.

Regarding the *hygiene* of Lupus, attention should be paid to diet, climate, and exercise.

The diet should consist chiefly of mutton, beef, or game, either roasted or broiled, well seasoned with condiments, and relieved with a fair proportion of fresh vegetables, especially of such as belong to the order Cruciferae, *e.g.* cress, water-cress, radishes, etc. Coffee is a more suitable beverage than tea. A glass or two of wine should be taken at dinner.

The patient should reside at some part of the sea-coast where the climate is dry and bracing, should be as much as possible in the open air, and should take regular and active exercise.

The general treatment embraces the use of both internal and external remedies.

The internal remedies employed are, cod-liver oil; the preparations of iron, more especially the iodide; iodide of potassium; the liquor arsenicalis; Donovan's solution; the biniodide of mercury; quinine; the various bitter infusions, more particularly those of gentian, hop, or of the leaves of the walnut-tree; sea-water, etc.

Externally, baths containing sulphuret of potassium, iodine, carbonate of soda, sea-salt, or sea-weed, are made use of.

The local remedies are, poultices, and emollient applications to remove the crusts; huile de cade; a solution of tannin in glycerine; the tinctura iodinii, either *per se*, or mixed with an equal quantity of linimentum iodinii; cashew-nut oil; ointments of iodine, of iodide of potassium, or of iodide of lead; creasote ointment; ointment of iodide of arsenic, or of either the green or the red iodide of mercury; chloride of zinc; Vienna paste (equal parts of potash and lime); terchloride of gold; arsenic; sulphate of copper;

nitrate of silver, in powder or solution; butter of antimony; the actual cautery; carbolic acid; sesquichloride of iron; acid nitrate of mercury; caustic potash; chromic acid, etc.

The local treatment of Lupus, as may be gathered from the list of remedies given above, may be conducted on either of two systems; that of stimulating the chronically inflamed skin, with the view of favouring the absorption of the lymph deposited in its structure, and promoting cicatrization; or that of destroying the diseased skin, and leaving the new surface produced by the action of the escharotic to heal.

Very excellent authorities are in favour of cauterization, as the speediest and most effectual plan of dealing with Lupus; but the author's experience of the treatment of this disease has been such as to lead him to prefer the application of stimulants to that of caustics. He has found that cauterization is by no means invariably followed by cicatrization; that it often has to be *frequently* repeated before this result is obtained; and that it does not prevent the disease reappearing in the same situation. In cases that have been treated by cauterization, and in which the disease has subsequently reappeared, he has found that the cicatrization of the diseased surface can be produced by stimulation, in a shorter time than had been previously required by the system of cauterization. Another objection to the use of caustics is, that greater deformity is left when a patch of Lupus has been healed after cauterization, than when it has been healed by the application of stimulants. In a region such as the face, where the least loss of substance may occasion great disfigurement, it is important to add to the ravages of the disease as little as possible.

In the choice of the stimulant to be used, the practitioner should be guided by the condition of the diseased surface, and its sensitiveness to the action of irritants.

The author has reason to believe that remittent is preferable either to intermittent or to continuous stimulation.

Another method of treating Lupus locally, and one that has of late years met with considerable favour, is that which

may be distinguished as the *mechanical* method as opposed to the (dynamical) local treatment by means of drugs.

The mechanical treatment of Lupus is of two distinct kinds: namely, treatment by erosion and treatment by scarification. Treatment by excision would come under the same heading, but it may be discarded from consideration here. Although it has found favour with some surgeons, it has never been advocated by dermatologists. In the present state of knowledge it can only be regarded as a crude and unjustifiable procedure.

Treatment by erosion is performed by scraping off the diseased tissue by means of a minute steel spoon. The remarkable softness and friability of the portions of skin invaded by Lupus, as contrasted with the natural toughness and resistance presented by the uninvaded skin, lend themselves readily to this method. If only moderate and slight pressure be exerted in using the spoon, the operator becomes guided by his sense of touch as to what are the precise limits within which it is expedient, in each instance, to restrict the process of erosion.

Treatment by scarification is of two kinds: namely, punctiform scarification and linear scarification. The former is effected by puncturing the affected skin with a needle at close intervals. The latter is effected by performing a number of closely-spaced but very shallow parallel incisions on the invaded skin.

The mechanical treatment of Lupus may be rendered absolutely painless, and indeed without sensation of any kind, by first freezing the portion of skin about to be treated. This may be conveniently done by means of the æther-spray.

SECTION II.—CHELOID.

CHELOID, or Keloid, is a small, indolent, persistent tumour, developed in the thickness of the skin. It may be either pale, shining, oval, and flattened, or red, wrinkled, elongated, and prominent.

Cheloid is of two kinds: the one, spontaneous, or oval, or true; and the other, cicatricial, or cylindrical, or false keloid.

Spontaneous keloid occurs generally as a single tumour, which is oftentimes developed on the front of the chest about the middle line, crossing the sternum transversely. Its general outline is oval; its surface flattened, sometimes even slightly depressed towards the centre; its substance hard and resisting. It is pretty firmly rooted, and immovable; when of long standing, it is often extremely tender to the touch. The skin covering it has a tense, shining appearance; its colour, generally white, is sometimes pink. At its margin the tumour gives off a number of filamentous digitations; these subside into the surrounding skin, which becomes somewhat puckered by their gradual contraction. The dimensions of the swelling rarely exceed two or three inches in length by a quarter of an inch in height. Often varicose venous radicles may be seen marbling its surface, and occasionally ligamentous-looking bands may be seen (through the tense skin) crossing the tumour near the surface. Spontaneous keloid commences as a minute, hard, shining tubercular elevation, which takes several years to attain the size mentioned above. Its development is attended with itching, pricking, or even lancinating pain. It has been noticed on various parts of the body, but it occurs generally on the chest, on the arm, or on the neck.

Cicatricial keloid is generally multiple. It presents nothing of the oval outline, the shining surface, the cartilaginous consistence, or the flattened shape of the spontaneous

keloid tumour. It appears as elongated prominent elevations of a semi-cylindrical shape, which bifurcate as they extend. They have some sort of resemblance to the larger divisions of the root of a tree, where these rise half above the ground, and this resemblance is increased by the appearance of the skin covering them, which is dry, and wrinkled transversely to their length. Their colour is a tolerably deep red. This variety is less persistent than the other, and will sometimes disappear spontaneously within a few months after its commencement.

The causes of Cheloid are very obscure. It is often developed on a cicatrix, but it appears also on perfectly sound skin; it has been known to follow a bruise. It is not hereditary; nor contagious; nor is it connected with any disturbance of the general health, or with any specified constitutional condition.

The spontaneous variety of Cheloid, once developed, is apt to continue. Sometimes, however, although rarely, its colour may become altered and the swelling subside, but some traces of it always remain.

The cicatricial variety generally disappears completely of itself.

The disappearance or diminution of Cheloid tumours is effected by interstitial absorption. They have no tendency to ulceration. Neither variety of Cheloid exerts any perceptible influence on the general health.

The disease cannot well be mistaken for any other affection.

TREATMENT.—Chloride of ammonium, cod-liver oil, or the alkaline iodides, internally; ointments of iodine, or of various iodides, locally. Sometimes, stimulating mercurial preparations are of service. Severer measures, such as cauterization or excision, are, at best, useless. The author has often procured the rapid disappearance of cheloids, by subjecting them to repeated linear scarification.

SECTION III.—VERRUCA.

VERRUCÆ, or warts, are little tumours of the skin, varying from the sixteenth to the eighth of an inch in height, which consist of a greater or less number of the natural papillæ of the skin greatly hypertrophied, and imbedded in a mass of thickened cuticle.

They appear, commonly, as small tubercular elevations of the colour of the surrounding skin, which are somewhat constricted at the base. Their upper surface, which is rather more prominent at the centre than at the circumference, is rough, rigid, and nodulated, the nodules being separated by linear depressions, so that the growth has something of the appearance of the head of a cauliflower in miniature.

On attempting to detach a portion of a wart by the fingernail, it is found that its substance may be readily picked off to a certain depth, coming away in the shape of nodules of epidermis, without either pain or bleeding being caused by its removal.

If the top of a wart be sliced off, the section exhibits a reticulated marking, which divides the area into a number of polygonal spaces corresponding in size to the nodules seen on the free surface. In the centre of each of these spaces, if the slice removed be a thick one, is a small bleeding point. A wart so mutilated, if left to itself, soon regains its original size and appearance.

The shallow linear depressions, which have been referred to as mapping out the surface of the wart into nodules, are sometimes extended as fissures deeply into its substance, so as to split it into segments, which may be made to separate temporarily from one another by pinching up between the finger and thumb the portion of skin on which the wart is situated.

Sometimes, however, the segments, instead of being parallel and close-set, divaricate, so as to give the wart more of the arrangement of a bunch of carrots (*Verruca digitata*) than of a cauliflower.

Warts, although their height is pretty constant within the measurements before stated, may vary considerably in area. This may be so limited that the wart has a pedunculated rather than a sessile appearance, its constricted base giving it the shape of a club; or the area may be so considerable as to give it the appearance of an elevated patch more than of a tubercule; sometimes the patch assumes the shape of a wavy band.

Warts may appear on any part of the surface, but they are especially frequent on the face, neck, and hands. They are so much less sensitive than the surrounding skin, that pressure made on one is felt rather around than beneath the growth.

Although sometimes congenital, warts may commence at any age; it is far more common, however, for them to appear in children than in adults; and in the former they are more numerous although usually of briefer duration than in the latter; thus in young children it is not uncommon for a widely distributed eruption of warts to disappear in the course of a few weeks.

It is said that warts are contagious, and that they are more common on the hands of agricultural labourers and other persons whose occupation necessitates the frequent handling of rough substances. With these statements, however, the author's experience does not accord.

Warts are mere disfigurements which exert no influence of any kind on the general economy, and are not even productive of any local discomfort.

As has been already mentioned, they will often disappear spontaneously, and this event is far more probable in the case of a child than of an adult; but they will sometimes resist cauterization and other severe measures with singular obstinacy, reappearing time after time in their former position shortly after they have been (apparently) destroyed.

Verruca may be mistaken for molluscum or spilus.

It may, however, readily be distinguished from *molluscum contagiosum* by the latter being lobulated and marked with a small depression from which a milky fluid can be expressed

by its having a smooth, polished, and far more sensitive surface; and by its being found on section to consist of a thin envelope enclosing a brain-like substance, as well as by its tendency to terminate either by ulceration or sloughing.

In *m. non-contagiosum*, if the tubercle be plump it will present on its smooth, soft surface a hilum from which a tenacious wax-like matter can be squeezed. If the waxy contents and the hilum be absent, the tumour will be pendulous and flaccid.

Spilus is always a congenital affection. The elevated spot is always darker than the surrounding skin, and is often surmounted by a tuft of hard hairs.

TREATMENT.—This should consist either in the removal of the tubercles by ligature, or by excision, or in destroying them by means of various caustics or by erosion.

If the ligature be employed, the little tumour should be pulled forward by means of a hook or forceps, and a thread of silk or a piece of thin silver wire be tightly applied round its base, so as to embrace if possible a small portion of the surrounding skin.

Or, if excision be practised, the neck of the little tumour should be put as before on the stretch, and a small portion of the neighbouring skin be removed with it. A pair of scissors curved on the flat is the most convenient implement.

If cauterization be preferred, the repeated application every other day, to the wart, of a glass brush dipped in carbolic, in fuming nitric, in hydrochloric, or in sulphuric acid, or in a strong solution of chromic or of acetic acid, is the plan to be adopted.

A preferable method, however, to any of the preceding is the treatment by erosion. This is effected by using a minute steel spoon. The wart, and the skin immediately around it, is first frozen by means of the æther-spray, so as to render the little operation perfectly painless. The wart is then rapidly picked off and picked out by means of the small steel spoon.

CHAPTER VIII.

MACULÆ.

A **MACULA** is a permanent discoloration of some portion of the skin, often with a change of its structure; the discoloration may be white or dark-coloured.

The macular diseases of the skin are *Nævus*, *Lentigo*, *Ephelis*, and *Vitiligo*.

A *Nævus*, in the sense in which the term will be understood here, may be defined as a congenital, permanent discoloration of the skin, in some cases with, in others without, elevation beyond the surface of the normal skin.

Lentigo is a yellowish discoloration of the skin, the result of a lesion of the pigmentary secretion, congenital or acquired; occurring in the form of numerous minute spots, discrete or confluent, occupying the exposed parts of the surface.

Ephelis is a yellowish-brown discoloration of the skin, the result of a lesion of the pigmentary secretion; occurring in moderately-sized patches.

Vitiligo is a milky-white discoloration of the skin, the result of a lesion of the pigmentary secretion, congenital or acquired; occurring in the form of rounded patches of variable size.

SECTION I.—NÆVUS.

Nævi are of two kinds, the pigmentary and the vascular.

The *pigmentary Nævi*, or moles (or *Spili*), occur usually as small, rounded stains, which may vary in colour from

a faint tawny yellow to a dark brown. The cutis is sometimes raised and thickened, and the discoloured spot is often surmounted by a tuft of hairs. In some cases the Spilus, in place of being small and rounded, is extensive and of irregular shape. The discoloration of the skin is due to an excessive (local) development of the pigmentary matter of the cuticle. When the mole is raised, the elevation is due to simple hypertrophy of the cutis. The hairless moles are popularly known as toad-marks. Those that are surmounted by hairs are called mouse-marks or mole-marks. Moles may be very few in number or they may be very numerous.

The situations in which they most commonly present themselves are the face, the neck, and the hands.

In some rare cases the greater part of the body may be covered with an extensive hairy mole, so that the individual when stripped looks more like a monkey than a man.

Vascular Nævi appear either in the form of stains, which are level with the surface of the skin, or as tumours, which project beyond it. In the one case they are merely cutaneous; in the other they are more deeply-rooted, and do not always involve the skin. The former kind results from an excessive development of the capillaries of the skin, while the latter kind may be due to a congeries of dilated arteries, capillaries, or veins.

It is the former kind only, the *Port-wine-stain* as it is popularly called, that will be considered here.

The Port-wine-mark occurs usually in the form of purplish stains. The tint of these, however, in different cases varies considerably. Thus, they may approach a brick-red, a claret-red, or a livid blue colour. Sometimes the stains are extremely small, presenting merely the appearance of a red dot with minute branching lines radiating from it (*Nævus araneus*, or spider-mark); but often they are extensively spread. When of large extent their shape is very irregular. They may occupy any part of the surface, but are seen most commonly on the face and neck. They are quite superficial.

Their colour, which disappears almost completely under the pressure of the finger, varies in intensity under the influence of such causes as augment or diminish the capillary circulation.

Nothing is known as to the determining causes of these malformations. They are popularly supposed to be occasioned by the longings of the mother during the time of her pregnancy for various delicacies which are thought to bear some sort of resemblance to the stains, *e.g.* for claret, port wine, or slices of ham; or to result from her having been startled by some object of aversion which resembles the mark, *e.g.* a toad or a mouse.

The pigmentary Nævi usually last for life, without undergoing any sensible change; in some cases, however, they gradually become less distinct.

Vascular Nævi also remain, in most cases, without change during the whole of life. Some, indeed, soon after birth become decidedly paler, while others, in the course of a few weeks, altogether disappear; but those which continue unaltered for the first few months rarely undergo any subsequent change.

Both kinds of Nævus are such familiar and peculiar objects, that they can scarcely be confounded with any other lesion of the skin.

TREATMENT.—Both Moles and Port-wine-marks are considered by the majority of writers as incurable; that is to say, all the means which they have employed with any success for the removal of the stains have always left a scar more disfiguring than the stain itself.

If anything be attempted, the cautious application of caustics, or if there be much elevation of the stain and its area be very limited, the application of a ligature, are the remedies suitable to Moles.

Frictions with croton-oil or with tartar-emetic ointment, the application of blisters, the use of caustics, or (in an unvaccinated person) inoculation of the patch with vaccine matter, are means of attacking Port-wine-marks. The

author has succeeded in procuring the complete disappearance of patches of port-wine-mark, and that without the production of any scar, by means of repeated linear scarification; nevertheless this plan very often fails.

SECTION II.—LENTIGO.

LENTIGO occurs in the form of numerous, minute, rounded, yellowish stains, of the size of mustard or lentil seeds.

The tint of these varies a little: thus, their colour may be a bright (saffron) yellow, a duller (tawny) yellow, a warmer (reddish) yellow, or a brownish yellow; in the last case the stains look like scales of bran sprinkled on the face.

The spots may be either discrete and scattered pretty equally over the region occupied by them, or clustered and more or less confluent.

They occupy most commonly the face and (to a less extent) the hands. But in persons of out-door occupation, whose chest and arms are habitually bare, *e.g.* agricultural labourers or sailors, freckles are common on the forearms and upper part of the chest.

They are congenital, or appear during childhood.

They are found generally in persons of fair complexion and lymphatic temperament, but especially in those who have auburn or red hair, and *very white* skins, so that they appear to be produced by an unequal distribution rather than by an excessive development of the pigmentary matter of the skin.

Freckles are not accompanied by itching or any other sensation, nor is there either elevation or desquamation of the discoloured surface.

Spots, which in no way differ from congenital or infantile freckles, are produced in certain persons on exposure to the sun's light, and appear only in summer. Those who are permanently freckled are especially liable to these ephemeral

freckles, so that the freckling appears intensified during the summer.

The congenital or infantile stains may last for life, but they often disappear during adolescence. Those which are caused by the rays of the sun generally disappear when their cause ceases to operate. This latter kind, although as regards appearance they are essentially Lentigo, are in their nature more closely allied to ephelis than to the congenital Lentigo.

Lentigo may be mistaken for ephelis, pigmentary nævus, chloasma, or for the stains left by 'syphilitic lichen.'

But in *ephelis* the patches are much larger than in Lentigo.

Pigmentary nævi are never so numerous as freckles; their shape is more irregular, and they are of larger size.

From *chloasma*, and the stains that succeed to '*syphilitic lichen*,' Lentigo may be distinguished by the same signs as ephelis.

TREATMENT.—For the congenital freckles nothing can be done; but for those which are caused by the rays of the sun the same measures are appropriate as for patches of ephelis of similar origin.

SECTION III.—EPHELIS.

EPHELIS occurs in the form of yellowish-brown, rhubarb-coloured stains. These stains at their first appearance may be no larger than a threepenny-piece, but they usually extend in a variable degree, so as often to acquire the size of a crown-piece. As they increase in area their margin, which at first is tolerably regular, becomes more or less uneven.

The disease consists simply in a change of the *colour* of the skin, without any induration or thickening of its substance, or any desquamation of the cuticle. It produces no appreciable disturbance of the general health, nor is it

usually attended with any local sensation. In some cases, however, there is slight itching of the discoloured skin.

The colour of the stains does not vary much, but they occasionally exhibit somewhat more of a warm yellow, or, on the other hand, more of a cold grey tinge, than is implied by the description 'rhubarb-coloured.'

The stains are not congenital, and do not often appear before adult age has been attained. They occur usually on some part of the patient's fore-surface, but are far commoner on the face than in any other situation. In females they frequently appear soon after the commencement of pregnancy, disappearing shortly after delivery. In such cases the stains usually affect the forehead chiefly, and to a less extent the cheeks and upper lip. In some women they appear at the menstrual periods, disappearing during the intervals.

Ephelis as met with on the face of females, where it constitutes the condition known as "the mask," is, in its fully developed condition, a somewhat striking disfigurement. When the discoloration is pronounced, and of full extent, it presents the appearance of having been artificially produced. According to the author's observations, the condition is restricted to occupying a definite map or plan on the face. This map presents a most sinuous outline, and consists of a continent furnished with bold peninsulas, as well as various islets, all of which have their appointed stations. Notwithstanding this irregularity of general outline, the patch always corresponds on the two halves of the face. The outline of the "continent" and the position of the "islands" is always the same on the left side as it is on the right.

When occupying its full extent, the brown discoloration is thus distributed. On the centre of the forehead is placed what may be described as the main continent. This consists of a large brown disc, the diameter of which is indicated by the fact that its upper edge is quite near to the edge of the hairy scalp, while its lower edge is equally near to the root of the nose, so that the disc occupies the whole of the middle

of the forehead. Its outline, although slightly wavy, constitutes a tolerably regular circle. Its margin is quite abrupt, indeed the disc is always somewhat darker at the edge than it is at the centre, so that it presents the appearance of an accentuated and extensive blot.

From this "continent" extend three promontories, all of which proceed from its lower margin. Two of them extend horizontally outwards, one from either side, along the lower part of the forehead. These promontories are somewhat narrow in proportion to their length, but maintain an uniform breadth throughout their course. They are somewhat arched upwards, following the curve of the eyebrows. They are placed at a little distance above the eyebrow, running parallel to the eyebrow for the inner two-thirds of its length, and they terminate abruptly, so that they present the appearance of an extra but fainter pair of eyebrows.

The third promontory is much thicker as well as shorter than the other two, and descends straight down on to the root of the nose, where it promptly divides into two portions, which are also short. Each of these descends slantingly down on its own side of the bridge of the nose, on which it again divides into three fingers, which are also very short, and which terminate abruptly. Close to the ends of these fingers are three or four islets. These occupy that part of the cheek which is close to the bridge of the nose, and have somewhat the appearance of unusually large freckles.

Two other islets remain to be described. These occupy the upper lip. They are placed, one on either side, midway between the nostrils and the edge of the lip, but somewhat nearer the latter. They are horizontal bands, which are separated by a moderate interval, and which follow the curve of the lip just as a moustache does. They extend nearly to the end of the lip on either side. They look, more or less, like a pair of moustaches.

The "mask" therefore consists of the upper mass with its promontories and islets, which present a weird cuttle-fish-like (octopus-like) appearance; and of the lower moustache-

like islets. It derives its name, of the "mask," from the small black half-masks which are worn at masked balls, and cover only the upper part of the face, their lower edge being ornamented with a fringe of black lace. It will be noticed, from the foregoing description, that the large blot which covers so large a part of the forehead, and extends down over the root of the nose, resembles more or less the mask itself; whereas the fingers and islets, which continue it down over the bridge of the nose, represent the fringe of the mask.

The author, who has examined very many examples of the "mask," has never seen its limits, as above described, transgressed in any instance: although he has often observed examples in which these limits were only partially occupied. Many women, for example, exhibit only the large frontal disc, and in some of these the central portion of the disc presents quite a faded and washed-off appearance. Some present the disc and the "extra eyebrows" without the rest of the map being filled in. Some, again, have only the moustaches. He has observed the disfigurement in individuals who, as he believes, had always been exempt from any of the reputed causes of Ephelis.

The occurrence of Ephelis may often be traced, however, in either sex to prolonged exposure to the rays of the sun in hot weather. When thus produced, the disease commonly appears on the forehead; but amongst agricultural labourers, who work with the chest and arms uncovered, it often affects the upper part of the breast, the forearms, and the hands. When due to solar influence, Ephelis will generally fade, and often disappear altogether during the winter months.

Although the stains of Ephelis will sometimes disappear with the cause (uterine or solar), which has given rise to them, they are often chronic. They exert no influence on the general health.

Ephelis may be mistaken for pigmentary nævus, for chloasma, and for the stains which succeed to syphilitic eruptions on various parts of the body, or which follow chronic eczema of the legs.

But *pigmentary nævus* is always congenital.

In *chloasma* there is branny desquamation of the cuticle, and the spores of the *Microsporon furfur* may be detected by means of the microscope in the epithelial scurf. The eruption, too, is attended with considerable itching, and is situated generally on the front of the chest, whereas *Ephelis* is more common on the face.

The *tawny stains* which are left by syphilitic eruptions, or by eczema of the legs, may be distinguished by their having more of a chocolate and less of a rhubarb tinge, and by the history of an eruption having preceded them.

TREATMENT.—If there be any derangement of the uterine function, this should be corrected. If, however, sun-light appears to be the cause of the discolorations, exposure to the sun should be avoided, or, at all events, a veil or shade of some sort should be worn.

As internal remedies, the various sulphurous mineral waters, the Vichy water, or potash-water, and mild laxatives have been prescribed.

As local remedies, benzoin fumigations, ointment of the sulphuret of mercury (gr. x to the ounce of lard), lotions of corrosive sublimate (gr. i to the oz.), of sulphuret of potassium (gr. xij to the oz.), of sulphate of zinc or acetate of lead (gr. viij to the oz.), or of the two mixed together, so as to form a solution of acetate of zinc, warm douches of sulphurous mineral water, the emulsion of bitter almonds, weak spirituous lotions, lotions of the dilute mineral acids, or of liquor potassæ (3ss to the oz.), or of Goulard's extract (m̄x to the oz.), chlorine water, ointments of the subcarbonate of potash or of soda (3j to the oz.), oxymel, are the applications employed.

SECTION IV.—VITILIGO.

VITILIGO (or *Leucoderma*) occurs in the form of more or less extensive, rounded (oval or circular) patches of blanched

skin. The patches commence as small white dots, which very slowly increase in size. The disease consists simply in an alteration of the *colour* of the skin, without any modification of its substance or alteration of its surface. The skin remains as thin, as supple, and as smooth as usual, but has, over a limited area, exchanged its natural colour for a dead-white appearance. If there be hairs on the patches, they will be white also.

The skin immediately surrounding each of these white patches is of a dusky brown hue, and, in proportion as the white patches get larger, the skin around them becomes more deeply tinged with brown; so that the disease seems to consist rather in an unequal distribution, than in an absence of the natural pigmentary constituent of the cuticle.

The whiteness of the patches ceases abruptly, so that their margins, whether rounded or sinuous, are always clearly defined; and they are rendered still more conspicuous by the more than naturally dark skin that surrounds them.

The dark areola which surrounds the white patch, although it ceases abruptly at its inner margin, yet at its outer border fades insensibly into the natural colour of the skin.

The colouring matter is not always collected equally and uniformly around the blanched spaces. At one part of their circumference it may form a black patch, while at another point the areola may be altogether wanting.

Vitiligo occurs on all parts of the body, but especially on the uncovered parts (face, neck, and hands), and on the hairy parts of the body (for instance, the scalp, the axillæ, and the pubes). It is a comparatively rare disease. It is commoner among the dark than among the fair races of mankind. In the negro, it constitutes what is known as the piebald negro.

Its course is always very slow and gradual.

Nothing at present is known of the causation of Vitiligo.

When congenital, it is not likely ever to disappear. When acquired, it occasionally disappears spontaneously, after which it may sometimes gradually reappear. The author has known three instances in which acquired Vitiligo has undergone spontaneous recovery within an average period of six years.

Congenital may be diagnosed from acquired Vitiligo, even in instances where it may be difficult to learn from the patient whether the condition was known to have existed at the time of his birth or was acquired during his lifetime.

In congenital Vitiligo the patches always remain stationary; they do not increase progressively in size; moreover, they are perched oddly on one side only of the individual, and there is no corresponding patch on the other side.

In acquired Vitiligo the patches are constantly spreading by slow degrees, or, if not so, are gradually disappearing, and they always exhibit a more or less perfect bilateral symmetry.

Congenital Vitiligo, although rare in man, is an extremely common phenomenon in the lower animals, in whom its "unsymmetrical" character may be conveniently studied.

Acquired Vitiligo has also been observed in other animals than man—for instance, in the horse. Quite recently it has been observed in the elephant: namely, in the case of the so-called "sacred white elephant" which was exhibited, in the London Zoological Gardens, in the spring of 1884. This animal, whose condition provoked much controversy at the time, was identified by the author as an example of acquired leucoderma or Vitiligo. On examining the other elephants in London at the time, the author found two more of them affected with the same condition. From this circumstance, and from what he has learnt from gentlemen who have resided in India, he concludes that acquired Vitiligo is much commoner in the elephant than it is in man. In man acquired Vitiligo is not often to be seen. Out of several hundred cases of skin disease, taken at random, it is rare to meet with more than one example of acquired Vitiligo.

Vitiligo is liable to be confounded with *Addison's disease*, but in the latter there are no definite patches whiter than the natural colour of the skin. There are dusky brown patches; but these are diffused, and their margins are, in all directions, gradually lost in the natural colour of the unaffected skin. There are no concave, well-defined margins to any part of the stains. The discoloration of the skin is, in Addison's disease, attended with marked deterioration of the general health; in Vitiligo, not so. Again, while Vitiligo is the effect of an unequal distribution of the pigment of the cuticle without alteration of its quantity, so that part of the skin is darker, part lighter than natural; Addison's disease is characterized by an excessive development of the pigment of the skin, so that parts of the surface are darker, but none lighter, than is proper to the individual in health.

TREATMENT.—No remedies are known which are of any efficacy in the treatment of Vitiligo.

CHAPTER IX.

SYPHILIDA.

THE term 'Syphilida' comprises all diseases of the skin that are developed under the influence of syphilitic infection, excepting the primary syphilitic ulcer or chancre.

Although differing considerably from one another, not only in aspect, but in situation, course, and many other details, the syphilides have nevertheless certain characters in common, which distinguish them as a class from other diseases of the skin.

The *colour* of the syphilides is peculiar. It has been compared by some to that of metallic copper, by others to that of the lean part of a ham. For this tint to be present it is not necessary that the surface should continue unbroken; thus it may not only be present in exanthematous, papular, and tubercular syphilides, but may be seen also around the edges of syphilitic pustules, blebs, and ulcers.

The *shape* of the eruption is frequently annular. Thus it may form complete circles or ellipses; or these may be incomplete, so that a patch may assume a crescentic or a horse-shoe shape; or two complete rings may be in juxtaposition, so that a figure of 8 is formed; or two incomplete rings may become fused together, so as to resemble the letter S or the letter E.

A syphilide is rarely attended with itching or smarting.

The often *mixed character* of a syphilitic eruption, that is, the co-existence of several distinct varieties of syphilide, is

another means of recognizing its nature; thus syphilitic rashes, scales, papules, and pustules may occur together on the same individual.

The *secondary products*, such as the scales, the crusts, the ulcers, and the scars of a syphilide, have characters which distinguish them from those of a 'simple' cutaneous disease. The *scales* of a squamous syphilide are scantier, finer, smaller, and more adherent to the surface beneath them than those of a simple squamous affection. The *crusts* left by a bullous or an ulcerating-tubercular syphilide are much thicker and harder, and are more firmly adherent than the crusts of a simple eruption. They are usually of a dark green colour. Their surface, which is raised at the centre, is often marked by a series of concentric rings, showing a stratified arrangement of their substance, and may be dotted here and there with little nodular projections, so that the crusts may bear a pretty close resemblance to limpet-shells. The *ulcers* that are produced by a syphilide are generally circular, and have clean-cut, perpendicular edges, and a grey, pultaceous floor. Their margins, as before mentioned, are of a coppery hue. The *cicatrices* left by the ulcers retain for some time the tawny-brown hue of the eruption that has preceded them. After this has faded, they may often still be recognized by their preserving the traces of an annular or a crescentic arrangement.

No one, however, of the characters above detailed is pathognomonic of a syphilide.

If, for example, the tawny hue of an eruption be regarded as an absolute proof of its syphilitic origin, simple psoriasis would at once be brought under the category of the syphilides. On the other hand, the absence of this hue cannot be regarded as positive evidence of the simple nature of an eruption, since many of the syphilides at their commencement do not at all exhibit it, but are of a bright, rosy-red colour, assuming the tawny tint only as they are beginning to fade.

The annular arrangement too is by no means *peculiar* to

eruptions of syphilitic origin, since it is found also in lichen, lupus, psoriasis, and herpes circinatus; nor is it even a constant symptom of syphilitic cutaneous disease. It is wanting in 'syphilitic acne,' in 'syphilitic lichen,' and in 'mucous tubercules.'

Again, itching and smarting are not always completely absent from a syphilitic eruption, and are alike rare in (scrofulous) lupus.

Nor is it an invariable rule that one variety of cutaneous syphilis should be accompanied by some other. For instance, 'syphilitic roseola' often occurs singly; so do 'mucous tubercules.'

In like manner exception may be taken to any one of the secondary products of cutaneous syphilis being considered as constituting, by its presence or absence, a pathognomonic or absolutely distinctive sign of the syphilitic or non-syphilitic nature of an eruption. But enough has been said to show that each of the phenomena enumerated above as generic features of the Syphilida may, in its turn, be altogether wanting, or but faintly apparent, and that there is no single characteristic of cutaneous syphilis, which, taken separately, may not be more or less simulated by non-syphilitic eruptions.

In determining whether a disease of the skin be syphilitic or not, much assistance is to be derived from a knowledge of other changes produced by syphilis, besides those wrought in the skin itself, such as :—

Redness of the fauces.

Opaline infiltration (in patches) of the mucous membrane of the cheeks, fauces, posterior surface of the pharynx, uvula, tonsils, palate, tongue, or gums, or ulcers in the same situations.

Chronic laryngitis, indicated by a husky whispering quality of the voice.

Mucous tubercles (often complicated with deep fissures) at the angles of the mouth, at the nostrils, the anus, and the vulva, or prepuce and scrotum; or condylomata (cauliflower excrescences) of the anus, vulva, or prepuce.

Neuralgia, affecting both sides of the head over the frontal and parietal regions.

Rheumatic or osteocopic pains (as they are termed), felt along the bones and in the joints of the limbs, becoming worse at night-time.

Thinning of the hair of the scalp and face, sometimes in a very considerable degree.

Periosteal swellings, exostoses, caries of the bones of the cranium or face, circumscribed indurations of the subcutaneous-cellular tissue, syphilitic iritis, the syphilitic cachexia.

The various forms of syphilitic cutaneous disease may be arranged in eight groups, as follows :—

Vegetative, exanthematous, vesicular, squamous, papular, pustular, bullous, and tubercular syphilides.

Some of the syphilides appear soon, some late, after the occurrence of syphilitic infection. In other words, some may be spoken of as the earlier, and some as the later manifestations of the syphilitic diathesis. To the former the name of "secondary," to the latter, that of "tertiary syphilides" has been given. It would be unwise to abolish these distinctions (although it must be confessed, that sometimes the so-called "tertiary" appear soon, and the "secondary" late after syphilitic infection), provided that no more than a just significance be attached to them; that the term "secondary syphilide" be held to mean only "a species of syphilitic eruption, which is not usually associated with depravation of the general health, does not occasion any notable destruction of the skin, and which, when it occurs, generally makes its appearance soon after the acquirement of the syphilitic diathesis;" and that a converse meaning be attached to the term "tertiary syphilide."

With this understanding, it may be said, in general terms, that the vegetative, exanthematous, vesicular, squamous, and papular syphilides belong to the "secondary," and that the pustular, bullous, and tubercular syphilides compose the "tertiary" division.

SECTION I.—VEGETATIVE SYPHILIDES.

These are among the commoner of the manifestations of constitutional syphilis, and are developed often within a few weeks after syphilitic infection.

But although they may fairly claim to be classed among the secondary symptoms of syphilis, inasmuch as they make their first appearance many weeks after infection, and in situations remote from the point of inoculation; they differ from all the other secondary symptoms of syphilis, in being endowed with the capacity of playing also the part of primary syphilis: they share with the chancre the property of transmitting syphilitic infection.

The vegetative syphilide is of two kinds,—the flat and the prominent.

The flat variety, known under the name of “mucous tubercule,” or “mucous patch,” commences as a small, rounded, slightly elevated, rose-red patch, which soon becomes excoriated. The raw surface thus produced, which may be either of a bright pink or an ash-grey colour, is composed of numerous moist, flattened granulations, which are marked out by very shallow, linear depressions. It presents such an appearance as would be produced, if an extremely fine net were drawn tightly over a slightly convex surface of moist mucous membrane, so that the pulpy substance of the mucous membrane might be forced to bulge a little through the meshes of the net. The appearance of the surface does not convey the impression of an open sore: the granulations, if they may be called so, are too regular in their arrangement, too flat, and too tough (not bleeding when they are touched); they appear to be protected by a tolerably tough, opalescent membrane, the surface of which has a moist glistening appearance. Altogether, the term ‘mucous patch’ is a very apt one.

The outline of the mucous patch is usually regularly circular or oval.

Its size ranges, ordinarily, from that of a sixpenny-piece to that of a florin.

Its surface, which is generally slightly convex, may, at its circumference, be even with the level of the surrounding skin. But, usually, the edge of a fully-developed patch is raised a line or two above the level of the sound skin, so that the raised patch is abruptly limited: its margin being connected with the lower level of the sound skin by a wall of tense, thinned, dusky-red skin. Sometimes the surface of the mucous patch is sprawled out, so that its everted margin overlaps the distended ring of skin, which limits its root. The mucous patch then presents a really "vegetative" appearance; this is the form that it ordinarily assumes.

When the mucous patch occupies an exposed situation (*e.g.* the cheek), the liquid secreted from its surface dries up into a tolerably thick yellowish crust, on detaching which, the mucous tubercle is disclosed, exhibiting its special appearance. But when, as more commonly happens, a mucous patch is in a cleft (as it is when developed on the margin of the anus), so that its surface is in contact with an opposed surface of skin: no crust is formed, but an abundant, viscid, fetid, irritating, mucous discharge, exudes from the patch, causing much redness and itching of the surrounding skin.

Mucous patches are almost invariably present in cases of infantile syphilis. Amongst adults, they are commoner with syphilitic women than with syphilitic men.

They occur:—in situations where the skin, at the various orifices of the body, joins mucous membrane: in the various mucous passages near to their external orifices: on the skin in the neighbourhood of the orifices of mucous passages: and in places where the skin is fine and habitually moist, as in folds where the opposite surfaces of the skin are frequently in contact.

Thus, they are common on the vulva, at the margin of the anus, on the lips, on the margins of the nostrils; in the

lower part of the rectum and vagina, on the tongue, on the lining membrane of the cheeks, on the tonsils, on the uvula, on the posterior wall of the pharynx; on the cheeks, in the clefts of the alæ of the nose, on the prepuce, in the cleft of the nates, on the scrotum, on the upper part of the inner surfaces of the thighs; in the groin, in the umbilicus, in the axillæ, between the toes, and around the nails.

Mucous patches are rarely attacked by ulceration. When they are disappearing they gradually dwindle (are atrophied); their secretion is diminished, and they become the seat of a moist, flaky desquamation, till at last nothing remains of them but a livid stain, which gradually fades, leaving no scar behind it.

The mucous patch can scarcely be confounded with any other lesion of the skin.

The prominent kind of vegetative syphilide is known under the names of "condyloma," "syphilitic wart," "cauliflower excrescence," etc.

This, like the mucous tubercule, presents a somewhat different aspect, according as it is developed in an exposed situation, or occupies some cleft, where it is protected and kept moist by the contiguous surfaces of the cleft.

In the one case, it will be an ash-grey, dry wart, hard and rasp-like to the touch; in the other, it will be composed of semitransparent, pink-coloured, moist, ill-smelling, fungous granulations. It may be sessile or pedunculated. Its constituent papillæ may be confluent, or, as is often the case, distinct, so that the growth is digitate.

It occupies the same situations as the mucous tubercule.

SECTION II.—THE EXANTHEMATOUS SYPHILIDE.

The exanthematous syphilide ('syphilitic roseola') is one of the most frequent and early of the symptoms of constitutional syphilis.

It appears in rounded patches, of the size of a sixpenny-piece or a shilling, having irregular, broken margins. Their colour, at first of a bright rosy hue, acquires afterwards a tawny, coppery tint, and finally disappears as a cold, grey stain. Both at its commencement and at its termination, however, the eruption is very faint, and may easily be overlooked. The patches, which are tolerably numerous, may be either distinct from or may run into one another. In the latter case, a sort of irregular web is formed, which, enclosing islets of unchanged skin, gives a mottled appearance to the surface. When recent, the eruption can be made to disappear momentarily under the pressure of the finger, but later on it loses this quality. Its appearance is preceded usually by slight febrile disturbance, lasting a day or two.

The roseolous rash generally lasts for one or two months, affecting some portion of the trunk or upper part of the arms or thighs. It makes its appearance about a month or two after primary infection. It is scarcely ever accompanied either by itching or smarting. As it fades, a transient desquamation will sometimes take place, but no ulceration or cicatrization. It leaves behind it, however, dull grey stains, which often persist for a long while. It coincides occasionally with other of the earlier manifestations of secondary syphilis—redness or opaline infiltration of the mucous membrane of the mouth or fauces, mucous tubercles, rheumatic pains in the limbs, papular, and other early syphilides.

Syphilitic roseola in itself is a mere rash, which disappears after a comparatively short duration, leads to no destruction of tissue, and leaves behind it no permanent trace; but viewed as a symptom of constitutional syphilitic infection, its appearance indicates that the subject of it is more or less liable to further manifestations of constitutional syphilis.

The diagnosis of syphilitic roseola will be facilitated by the co-existence of a chancre, or at least of the recent cicatrix of one on the genitals.

The affection may, however, be mistaken for measles, scarlatina, or roseola.

But in *measles* the eruption commences on the face, has a crescentic arrangement, and is of a mulberry colour; the eyelids are much swollen, and there is coincident coryza and bronchitis.

In *scarlatina* the eruption is most intense on the upper part of the chest, is punctiform, and is of a bright scarlet colour. The redness of the throat, too, is of a brighter hue than the dusky redness of syphilitic angina.

Roseola is attended with itching. Its duration is much briefer, and it fades without undergoing the changes of colour peculiar to the exanthematous syphilide.

SECTION III.—VESICULAR SYPHILIDES.

These also are among the earlier manifestations of constitutional syphilis. They are not, however, of frequent occurrence.

They have been named respectively (after the 'non-specific' eruptions that most resemble them) 'syphilitic eczema,' 'syphilitic herpes circinatus,' 'syphilitic varicella,' and 'syphilitic herpes phlyctænodes.'

'*Syphilitic eczema*' is characterized by the development of numerous small vesicles clustered together on a reddened surface, which soon acquires a tawny hue. The eruption occurs in irregularly-shaped patches of limited size. The vesicles last for several days, after which they either shrivel and are replaced by furfuraceous scales, or become ruptured and are succeeded by minute crusts, which on falling disclose small brown stains, which in their turn slowly disappear. The eruption may be prolonged over a variable period by a succession of crops of vesicles.

'*Syphilitic herpes circinatus*' appears in the form of small, elevated, reddened patches, surmounted by clusters of minute vesicles. The circumference of each of these

patches rapidly extends, at the same time that the centre subsides and fades, so that the eruption speedily assumes the form of narrow, reddened, elevated rings, each enclosing an area of skin, which is either of the natural colour or but slightly tinged with red. The rings are surmounted by minute vesicles, or more commonly by minute furfuraeous scales, and some acquire a tawny hue. The patches may be either few in number, and confined to a limited region, or extremely numerous, and widely spread. In the former case they occur usually on the side and back of the neck. In the latter they are thickly scattered over the greater part of the body, and give it a peculiar variegated appearance.

'*Syphilitic varicella.*'—In this variety the vesicles are large, distinct from one another, and scattered irregularly over the surface. They are surrounded by slightly elevated red areolæ, which speedily acquire a coppery tinge. After lasting for a week or ten days, the vesicles burst, and are replaced by dark-coloured, greenish-brown, adherent crusts, which at length separate, leaving in their place brown stains, which persist for some time. When the eruption is more or less clustered, so that the areolæ of several neighbouring vesicles become fused, it has been termed '*syphilitic herpes phlyctænodes.*'

Vesicular syphilides appear within a few months after contagion, and last usually a month or two. They coincide with such other syphilitic symptoms as have been mentioned in the description of the exanthematous syphilide.

The comparatively long duration of the vesicles individually, taken with the general diagnostic signs of cutaneous syphilis, will suffice usually for the recognition of syphilitic vesicular eruptions.

SECTION IV.—SQUAMOUS SYPHILIDES.

The squamous syphilides, which are among the earlier and commoner of the syphilitic eruptions, are 'syphilitic

psoriasis guttata,' 'syphilitic psoriasis circinata,' and the 'horny syphilide.'

'*Syphilitic psoriasis guttata*' is characterized by the appearance of reddened, disc-shaped elevations of the skin, which are scantily covered by small, dry, dingy-white, thin scales. The inflamed disc soon assumes a coppery tinge, and its circumference, which is bare of scales, forms a tawny-red areola around its scale-covered portion. The patches, which are as a rule rather oval than rounded, vary in size from that of a split pea to that of a shilling, rarely exceeding the dimension of the latter. They are distinct from one another, though sometimes closely set. This variety is usually spread pretty extensively over the whole surface of the body, but is perhaps more developed on the inner surfaces of the limbs than elsewhere.

'*Syphilitic psoriasis circinata*' begins as slight scurf-covered, reddened elevations, which, as they extend, subside at their centre, so as to acquire the form of rings. These papular rings, which may be complete or incomplete, are of a tawny-red colour, and are surmounted by small, thin, dingy-white scales. Their average diameter is that of an ordinary finger-ring. The disease may remain almost stationary in this condition for some time, till at length the scales disappear and the elevation subsides, and is replaced by a deeper-coloured tawny-brown stain. This variety occurs on the face, neck, and limbs.

'*Horny syphilide*' affects exclusively the palms of the hands and the soles of the feet. It appears first as rounded, slightly-elevated, tawny-red patches of the size of a split pea. These gradually increase in size, till they acquire the diameter of a fourpenny or sixpenny piece. Gradually the epidermis covering them becomes thickened, dry, hard, opaque, and yellow; assumes, in short, a horny appearance, and at length begins to separate in flakes. The disc of altered epidermis is surrounded by a tawny-red areola. Sometimes a large patch of this kind will completely cover the posterior part of the sole of either foot, the epidermis

acquiring in this situation an extraordinary thickness, and separating in large thick plates. After a time the desquamating patches are replaced by yellowish-brown stains, which gradually disappear.

'Syphilitic psoriasis' may be mistaken for 'simple' psoriasis.

But in '*simple*' psoriasis the knees and elbows are almost invariably attacked, the face rarely so. The outer surfaces of the limbs and the lower part of the back are the regions chiefly affected. The scales are abundant and imbricated, and have a nacreous lustre. The surface on which they rest is harsh and wrinkled; it is redder and less tawny than in the squamous syphilide. A narrow, dingy-white circle commonly surrounds the areola bordering the syphilitic scaly patch. This appearance is caused by a ring of altered and partially detached epidermis. It is less frequently present in simple psoriasis, and in the latter disease is thicker and presents a nacreous lustre; but it is not (as has been supposed) a pathognomonic sign of constitutional syphilis, nor is it limited to squamous eruptions.

The horny syphilide can scarcely be mistaken for any other eruption. The symptoms which have been already mentioned as distinctive of the syphilida generally will facilitate the diagnosis of squamous syphilides from non-syphilitic eruptions.

SECTION V.—PAPULAR SYPHILIDE.

The papular syphilide is the most common of all the syphilitic eruptions. It appears usually within two or three months after the occurrence of primary syphilis, and is accompanied by other of the earlier symptoms of constitutional syphilis. It is occasionally preceded by slight febrile disturbance, which subsides as the eruption comes out. It may coincide with apparently the most perfect general health.

Syphilitic papules are small, solid, firm, shining elevations,

which contain neither serum nor pus. Their colour is at first and for some time a bright red or rose-colour, which can be made to disappear momentarily by the pressure of the finger. Afterwards, as they are beginning to fade, they gradually assume a tawny tint, which, as they slowly disappear, becomes more and more pronounced. After this change of hue, the colour of the papules will no longer pass away under pressure. Soon after a papule has attained its full size, its top becomes covered with a small white scale.

There are two varieties of papular syphilide,—the conical and the flat.

In the *conical variety* (the so-called *syphilitic lichen*), the papules are small and cone-shaped. They are distinct from one another (not confluent as in simple lichen), and are thickly scattered over a large extent of surface.

In the *flat variety* the papules are much larger and flatter, and are less numerous. Their average size is that of a threepenny-piece. In these papules the tawny hue becomes deeper than in the conical kind.

Not unfrequently both varieties are found together.

Papular syphilide affects especially the upper half of the body, viz. the face, the neck, the upper limbs, the back, and the chest.

The average duration of each papule is from three to six weeks; but as the eruption usually comes out in a succession of crops, the disease may in this manner be prolonged over several months. The papules terminate in resolution, leaving behind them either dull, yellow-brown stains, or in some cases small depressed cicatrices, which for a long time retain the tawny hue, but at length disappear completely.

The eruptions for which papular syphilide may be mistaken are—lichen, prurigo, erythema (papulatum), acne (indurata), and tubercular syphilide.

However, in *lichen* the papules are not shining. They are closely agglomerated, and are much smaller than the syphilitic papules.

In *prurigo* the papules are paler and of smaller volume

than in the papular syphilide, and they are surmounted generally by a small black crust.

In *erythema papulatum*, on the other hand, the papules are more voluminous than in the disease under consideration, and change soon from a rose-red to a purple hue. Their duration is much briefer than that of the syphilitic papules.

In *acne indurata* the co-existence of other varieties of acne, the fact that from some of the (suppurating) papules a curdy, sebaceous matter may be expressed, the absence of the eruption from the chest, abdomen, and arms, and its somewhat purple hue, will suffice for distinction.

But the diagnosis of the papular syphilide from either of the above-named diseases, will be greatly facilitated by a recollection of the characters which have been already enumerated as distinctive of the syphilida generally.

From the *tubercular syphilide* the papular disease is distinguished by the smaller size of its pimples, by their not leading to ulceration, and by their not producing a permanent cicatrix. Again, syphilitic tubercles appear usually at a much later period after contagion than do the papules, and coincide with other of the later phenomena of constitutional syphilis.

SECTION VI.—PUSTULAR SYPHILIDES.

At one time, syphilitic eruptions were all of them believed to be of a pustular character. The term pustular, however, can with propriety be applied only to three kinds of syphilitic eruption.

These have received the names of "syphilitic acne," "syphilitic impetigo," and "syphilitic ecthyma."

"*Syphilitic acne*," one of the earlier syphilides, appears in the form of numerous isolated papules, each of which is surmounted by a small pustule. The average size of the pimples is that of a hemp-seed.

The solid base, at first of a rosy-red colour, gradually

acquires a brownish tint, and the small mattery head slowly dries up, producing a yellowish-brown crust, which at length falls off. The papule capped by it becomes absorbed, and is replaced by a small rounded depression of a tawny brown-red colour, which, after a scanty desquamation, either disappears completely or is replaced by a small rounded depressed cicatrix.

The pimples, which occupy, usually, a considerable extent of surface, may either be scattered equably over the region affected, or be collected into groups, but are generally, in either case, perfectly distinct from one another.

The favourite situation of the eruption is the back, but it appears also on the face, upper limbs, and thighs.

Each pimple runs a chronic course, lasting about a fortnight. The average duration of the disease, altogether, is about three or four months.

The invasion of the eruption is sometimes gradual, but, in other cases, an extensive surface becomes thickly covered in a comparatively short space of time; there is then slight febrile disturbance, lasting for two or three days.

This variety is often associated with conical papular syphilide; in some places, the papules predominating almost to the exclusion of the pustules; in some, being mixed in equal proportion with them; while in others, the eruption will be exclusively pustular.

"Syphilitic acne" may be mistaken for (simple) *acne*.

But the syphilide is generally more extensively spread. The grouped arrangement is one that rarely occurs in *acne*. *Acne* is a more chronic disease, and it exhibits, generally, a purple tint. The scars left by *acne* are linear and elevated, those left by the acniform syphilide are rounded and depressed. In *acne*, there is more or less curdy matter contained in some of the pimples.

"*Syphilitic impetigo*" is of two kinds, the superficial and the deep.

The *superficial* variety is one of the earlier syphilitic eruptions, and is associated often, with syphilitic roseola,

or with syphilitic lichen. It appears in the form of small pustules: these are generally arranged in small clusters, on rosy-red patches of skin, which soon acquire a tawny hue. The pustules are soon replaced by uneven, brown, somewhat thin crusts, which falling, leave superficial cicatrices, which retain for some time a tawny-brown colour. The eruption is sometimes preceded, for a day or two, by slight febrile disturbance; it may be kept up for some time by a succession of crops of pustules. It is common on the hairy scalp, but it occurs also on other parts of the body.

The *deep* variety is a "tertiary" syphilide, and occurs, usually, in cachectic persons, more particularly in those in whom the "syphilitic cachexia" has become developed. It is a more chronic disease than the superficial variety. It begins by an elevated, reddened patch, on which numerous confluent pustules appear; these become speedily replaced by a dark-green, uneven, tolerably thick crust, which conceals a moderately deep ulcer, having a coppery margin, clean-cut edges, and a greyish floor. After lasting for some time, the crust falls, leaving depressed, well-marked, livid cicatrices, which gradually acquire a brown hue, and at length become blanched. This variety is common on the face.

Syphilitic impetigo may be mistaken for (simple) *impetigo*. But the latter occupies, generally, a more extensive surface; is characterized by a more abundant purulent secretion, which produces crusts of a lighter colour; its pustules have a briefer individual duration; the inflamed skin does not acquire a coppery hue; no ulcers are produced; nor does the eruption, after it has disappeared, leave behind it any cicatrices.

"*Syphilitic ecthyma*" is characterized by the development of large isolated pustules, which become replaced by thick, dark-coloured crusts, covering ulcers.

There are two varieties of it, the superficial and the deep.

The *superficial* appears earlier, and is less severe than the deeper variety.

It commences in the shape of small, scattered, reddened patches, on each of which a pustule is shortly formed. The pustules, when fully developed, vary in size from that of a split pea to that of a split bean. They are prominent and rounded; their base is not solid and indurated, as in the acniform syphilide, but they are formed entirely of a collection of pus; they are surrounded by a tawny-red areola.

After a short time they burst, and the tenacious liquid they contain concretes into a moderately thick, rugged, greenish-brown, not very adherent crust, covering a shallow but characteristic ulcer; this at length heals under the crust, leaving a dusky, superficial, but often permanent scar, which becomes gradually blanched.

This variety occurs on the scalp (where it gives rise to permanent circumscribed baldness), on the limbs, more especially the lower limbs, and on the nates.

It is a not uncommon form of infantile syphilis, appearing a month or two after birth. But in infants, I have noticed that it presents special characters, which it may be well to mention: thus, it appears at first in the form of conical tubercles (which gradually suppurate throughout their whole extent, commencing at their summits), and is peculiar, too, in affecting the palms of the hands and the soles of the feet.

The *deep* variety (which ranks among the "tertiary" syphilides) commences as an elevated livid spot, which is soon replaced by a pustule containing sanious pus, and resting on a livid, slightly elevated, indurated base, which is broader than the pustule.

The pustule gives place to a thick, nodulated crust, elevated at the centre, of a dark-greenish colour, let into the thickness of the skin, and surrounded by a tawny-brown, swollen areola.

The crust conceals a deep ulcer, with perpendicular edges and a grey, slough-like floor. After a time this heals and the crust falls, disclosing a well-marked, depressed, livid cicatrix, which gradually becomes bleached.

Syphilitic ecthyma occurs, more especially, in the cachectic, whether the cachexia be more immediately due to the syphilitic virus, or to some other cause. Thus, it occurs in those who, contracting constitutional syphilis, have had their vigour impaired by intemperance, debauchery, privation, or exposure. It occurs, too, in infants, and in persons in whom the syphilitic cachexia has begun to manifest itself.

The superficial variety appears from six months to a year or more after primary syphilis; the deep variety, usually much later. The disease is generally, by a succession of pustular crops, prolonged over a considerable period.

The course of the deep variety extends over a much longer period than that of the superficial variety.

Syphilitic ecthyma is very apt to be confounded with "simple" *ecthyma (cachecticum)*, and the diagnosis is sometimes difficult, unless the history of the case, and the presence or absence of other indications of constitutional syphilis be taken into the account.

However, in the simple eruption, the areolæ surrounding the scabs are purplish rather than coppery. The pustules, in the majority of cases, are confined to the lower limbs, and the individuals attacked are generally either infants or aged persons. In the latter, the disease is often complicated with the characteristic indications of prurigo senilis, which disease the ecthyma is in such cases secondary to.

Syphilitic ecthyma, on the other hand, occurs on all parts of the surface, including even the head and face, and is commoner in adult age.

SECTION VII.—BULLOUS SYPHILIDE.

The bullous syphilide (*syphilitic rupia*) is one of the latest and most inveterate of the syphilides.

It appears in the form of tolerably large blebs; these are of an irregularly rounded outline; have a flat and some-

what wrinkled surface; project but slightly above the level of the skin, and contain a turbid, sanguineous serum, which is of a brownish colour. They are surrounded by a red areola, which speedily assumes a tawny-brown tint. After lasting for a short time the bleb becomes ruptured, and the liquid it contains dries up into a thick, hard, very adherent, dark-brown, or, more often, dark-green crust, beneath which is an ulcer.

The firm adhesion of the scab, the extremely chronic character of the sore which produces it, and the tendency of the latter gradually to spread, produce a peculiarity in the shape of the incrustations, which is very characteristic of the disease.

Thus, they are generally moulded in the shape of an oyster-shell, or of a limpet-shell; this arises from their being produced in successive layers, which, as the ulcer spreads, become progressively larger and larger. When the exudation is scanty, and the spread of the ulcer comparatively rapid, the oyster-shell shape results. When the purulent secretion is profuse, and the ulcer extends rather in depth than in area, the limpet-shell shape is produced.

In the latter variety, the resemblance to an oyster-shell is increased by the surface having a more or less flaky appearance; and in the more prominent kind, the limpet-shell appearance is often enhanced by the crust being studded with a number of small obtuse nodules.

Sometimes the thickest of these crusts are somewhat constricted at the base; this may be noticed occasionally, when they affect the neighbourhood of the face.

The ulcers are large (attaining sometimes the size of a crown-piece), are irregularly rounded, and have perpendicular edges. Their floor is formed either of flabby granulations, or of a tenacious, slough-like layer, and they discharge a fetid sanious plastic pus; they are deeper under the thicker crusts.

The number of the rupial patches varies greatly. Thus, even in a long-standing case there may have been but two

or three, while in other cases there may be a very large number.

In some cases the disease assumes a serpiginous character, spreading centrifugally over a large extent of surface. Its mode of progression, and the general appearance which it presents under this condition, will be found described under the head of ulcerating tubercular syphilides, with this difference only, that in this (the rupial) affection, the outer ring is formed by purulent blebs instead of tubercles.

The cicatrices left by the ulcers, present the various appearances described in the account of the ulcerating tubercular syphilides.

The bullous syphilide may occupy any region, and is sometimes spread over the greater part of the surface; but it affects, preferably, the lower limbs or the head (scalp or face). It is met with, usually, in debilitated or cachectic subjects, especially in those in whom the general condition known as the syphilitic cachexia has become confirmed.

It rarely appears earlier than a year or two after primary syphilis, and may not be developed till several years have intervened. It is usually of long duration, and if not cut short by suitable treatment may even last many years.

The bullous syphilide is so peculiar in its appearance, as to be scarcely liable to be mistaken for any other cutaneous disease.

The only disease that at all resembles it is *lupus*; but the pale granulations that form the floor of the ulcers of *lupus*, and the other diagnostic characters mentioned elsewhere as distinguishing *lupus* from the tubercular syphilides, are sufficient to prevent an error of this kind.

SECTION VIII.—TUBERCULAR SYPHILIDE.

Tubercular syphilide, or “syphilitic lupus,” as it is sometimes termed, is a not uncommon form of syphilitic cuta-

neous disease. It is one of the later phenomena of constitutional syphilis, and does not usually appear until after the occurrence of some of the earlier manifestations of the syphilitic diathesis. It may present itself, for the first time, many years after contagion, but at any period is always a very persistent affection. It is one of the "tertiary" or more inveterate forms of cutaneous syphilis.

Tubercular syphilide is of two kinds: the one, usually of earlier development than the other, very rarely leads to ulceration; while in the later and graver kind, ulceration is invariably produced.

The former (non-ulcerating) kind comprises two varieties, "the clustered" and "the scattered."

The latter (ulcerating) kind is divided, according to the character of the ulcers induced by it, into the perforating and the serpiginous varieties.

The *clustered non-ulcerating variety* is the commonest form of tubercular syphilide. It appears in the form of small, rounded, prominent, reddened tumours; these gradually acquire a dusky, coppery-red colour, and their surface becomes tense and shining. Their size varies from that of a pea to that of a nut. They are generally disposed in small circular or elliptical rings, which, though sometimes complete, are more frequently interrupted in two or three places; or even each of the component tubercles may be perfectly distinct from the rest. The area enclosed by the circle, as well as the intervals where the continuity of the circle is broken, is sometimes occupied by a superficial tawny-brown, slightly-desquamating cicatrix.

In other instances, the tubercles are disposed in small irregular groups. Where thus arranged, they are smaller, harder, and more prominent than when in the annular form.

They terminate ordinarily, although not invariably, in resolution; their surface losing its polished appearance and becoming slightly scaly; their substance getting soft and flabby, and their prominence gradually diminishing, till at last a depressed, indelible cicatrix is left, which retains, for

some time, a tawny-brown colour. This cicatrization is the result of the interstitial absorption of the disorganized tissue, and takes place without breach of surface.

Sometimes, however, the tubercles ulcerate and become covered with dark-green crusts, under which are formed cicatrices, of the kind just described.

This variety of tubercular syphilide appears most commonly on the face (forehead, nose, mouth, and chin); on the forehead, it has received the name of *corona veneris*. It runs a chronic course, lasting, usually, for several months.

The scattered non-ulcerating variety occurs in the form of small rounded or oval tumours, varying in size from that of a pea to that of a hazel-nut. They are sprinkled thickly or thinly, but in either case pretty equably over the region occupied by them. Their colour, at first a deep red, soon changes to a tawny coppery-red. They are of a pretty firm consistence. Their surface is shining, and they have a peculiar, infiltrated, semi-transparent appearance. After a time, their somewhat flattened summit becomes covered with a thin, whitish, adherent scale, which gradually peels off at its circumference, and at length becomes completely detached.

After this the tubercle begins to get flabby and to diminish in size, and finally disappears, leaving a depressed, brownish, indelible scar, the colour of which slowly fades away. In some instances the cicatrix altogether becomes, after a time, so faintly marked that it may be a matter of some nicety to say whether it exists or not.

This variety is met with principally on the face, but it occurs on the trunk and arms. Its duration extends usually over several months.

The perforating ulcerating variety appears in various situations, but usually on some part of the face, in the form of two or three clustered tubercles. These are of comparatively large area, varying in size, when fully developed, from that of a threepenny-piece to that of a shilling, or even of a half-crown.

Their elevation above the skin is but slight in proportion to their size; they are, however, deeply rooted. They are rather subcutaneous swellings than actual tubercules.

At first they are hard, firm, and elastic, and the skin covering them is reddened, the redness gradually acquiring a coppery character.

After a time the tumour softens; the coppery-red skin becomes livid and thinned, and at length ulcerates. A black, dry, thick, rugged crust soon forms over the sore.

On detaching the scab, a deep ulcer, having perpendicular edges (as if it had been cut out with a punch) and a grey slough-like floor, is laid bare. From this a foetid sanious discharge exudes, which, concreting, speedily reproduces the crust. Under this crust the ulcer, without increasing notably in area, gradually increases in depth, eating its way slowly through whatever tissues may lie next beneath it, even cartilage or bone. The margin of the ulcer is surrounded by a coppery-red areola.

The duration of the affection is always long. Its progress may become arrested, either spontaneously or under the influence of treatment. The ulcer then becomes cleaner. Florid granulations take the place of the grey slough-like substance that formed its floor. It becomes shallow, and at length cicatrizes.

The scars left by this variety of syphilide are usually somewhat depressed below the level of the skin. They may either be polished and even, or puckered and intersected by raised tendinous bands, which, meeting one another, give rise to hard tendinous knots. When recent, the scars are of a livid, coppery colour. This changes slowly to a dull brown, which, becoming gradually fainter and fainter, at length disappears, and a dull white indelible scar is left.

The serpiginous ulcerating variety begins by red, hard, shining tubercules, which gradually assume a coppery tint.

After a time they soften; their summits ulcerate and become covered with hard, dark-coloured, uneven crusts. On detaching one of the crusts, a shallow but abrupt ulcer

is disclosed, having a grey pultaceous floor, and exuding a sanious pus, which soon reproduces the crust.

Under this crust, by degrees, the ulcer granulates up, and gets glazed over with a livid-brown, tolerably smooth cicatrix, which, in process of time, becomes blanched.

While the tubercules that first appeared are undergoing these changes, fresh ones are developed close around them, and while they, in turn, are following a similar course, a third crop is appearing immediately beyond.

In this way the disease extends centrifugally, its margin being formed by tubercules, with, immediately behind them, a broken row of crusts, while the cicatrix in the interior is gradually being increased in area by successive additions to its circumference. Usually, however, the widening circle of active disease becomes broken and incomplete, owing to portions of it healing, and (the rest of it continuing to spread) the patch of altered skin, instead of remaining discoid, acquires an irregular shape.

The broad cicatrices left by this affection are in some cases smooth and even, though usually somewhat pitted. In others, however, they are puckered, and resemble the scars of severe burns.

This variety of tubercular syphilide occurs on the back, the chest, the face, and on the limbs in the neighbourhood of the joints. There are often several patches of it at a time.

The different varieties of tubercular syphilide are not all of them equally chronic, nor does each affect the general health in the same degree, nor are they similar in the matter of leaving behind them permanent scars.

In either of these respects the prognosis of the ulcerating will be less favourable than that of the non-ulcerating varieties.

As regards chronicity, the duration of either of the non-ulcerating varieties extends usually over a range of several months, while the ulcerating kind may be prolonged over several years.

The scattered non-ulcerating variety produces the least

permanent defacement, while the perforating ulcerating variety is the worst in this respect.

Indeed, the large destructions of tissue produced by the latter, and its preference for the face, occasion sometimes the most hideous disfigurement. Thus, one of the *alæ*, or even the greater part of the nose, may be destroyed; the mouth may be greatly deformed, an eyelid may be wanting, the frontal bone may be perforated, or even, as I have had occasion to see, the greater part of the calf of the leg may get eaten away. The same variety, too, is the most chronic of the tubercular syphilides, and is the least amenable to treatment. It is, moreover, attended with a more marked deterioration of the general health than any of the others.

The serpiginous is neither so persistent, so obstinate, or so grave an affection as the perforating variety. Still it leaves after it most extensive (although superficial) permanent scars, and, where copiously developed, is apt to impair considerably the general health.

The tubercular syphilides may be mistaken for various other eruptions.

The scattered, non-ulcerating variety may, possibly, be confounded with *acne (indurata)*. But in the latter there is usually an oily condition of the neighbouring skin. The syphilitic tubercles are more superficial than those of *acne*, which are more or less deeply imbedded in the substance of the skin. The latter, moreover, commonly suppurate, and may always be ascertained to contain a small collection of sebaceous matter in their centre. The scars left by the tubercles of *acne* are elevated and linear; those left by the syphilitic tubercles are, on the contrary, rounded and depressed. The extent of surface occupied by the eruption of *acne* is usually more limited, and the nodules are of a somewhat purplish, or, at the least, of a crimson red; whereas the area of the syphilitic eruptions is comparatively extensive, and its nodules soon acquire a coppery hue.

The clustered non-ulcerating variety to which the name of "*syphilitic lupus*" more especially belongs, is very apt to be

mistaken for (scrofulous) *lupus* properly so called, and this, more particularly, when it affects the nose or the cheek, which are the common situations of *lupus*. But the tubercles of *lupus* are commonly of a purplish hue; they are more flabby, and have a duller surface; that is to say, they want the tense shining appearance of the syphilitic tubercles. They are often accompanied by a puffy state of the neighbouring subcutaneous cellular tissue. The ulcers produced by the scrofulous disease either have undermined edges, or are ill-defined at their margin, and their base is composed of pale flabby granulations; whereas those of the syphilitic eruption have clean-cut, abrupt margins and a slough-like floor. The scars of *lupus* are irregular, contracted, and often ridgy; while the syphilitic scars are circular, even, and depressed. *Lupus* appears generally during the juvenile age, the tubercular syphilide during adult age; and, although the latter may fairly be considered a chronic eruption, its chronicity is as nothing in comparison with that of *lupus*, which progresses by almost imperceptible gradations, and endures for many years.

When arranged in rings, the clustered variety may possibly be confounded with *psoriasis (circinata)*. But in the latter the reddened ring is more continuous, its surface is rougher and duller, and it is covered with scales which exhibit a nacreous sheen.

The perforating variety of the tubercular syphilide can scarcely be mistaken for any other cutaneous disease.

The serpiginous kind is liable to be mistaken for a *phagedenic chancre*. But with the latter no symptoms of *constitutional syphilis* are present. The ulceration extends more rapidly, and spreads from the ordinary situations (the neighbourhood of the genitals) of the chancre; moreover, the sore is inoculable.

SECTION IX.—TREATMENT OF THE SYPHILIDES.

The remedy *par excellence* for constitutional syphilis is mercury.

Attempts have been made from time to time to discover some better remedy, and now and then it has been the fashion to enlarge on the dangers and disadvantages of employing this drug in the treatment of syphilis.

It has been said that the worst results of so-called tertiary syphilis were due rather to the remedy than to the disease; and it has even been proposed that syphilis should be left altogether alone, as being a very innocent affection in itself, provided it were not meddled with. Nay, some have gone further even than this, and have steadfastly advocated that the syphilitic patient should be, if possible, still further infected by repeated inoculation with chancre-pus at various parts of his body, and that this process should be persevered with until he became so thoroughly syphilitic as to be quite well! This doctrine (of 'syphilization') has had some illustrious advocates.

But notwithstanding all that has been urged against the use of mercury in syphilis, it still holds its ground as the most valuable of antisypilitics. It may be confidently stated that no remedy for syphilis that has yet been proposed can compare with mercury in efficacy and in rapidity of action, and that none is attended with less disadvantages, provided it be used with discretion.

At the same time, it must be admitted that although the best, it is by no means a perfect remedy for syphilis. It is useless prescribing a course of mercury for a person affected with an indurated chancre, in the expectation of securing him, by such means, immunity from all further manifestations of constitutional syphilis; and it is equally futile to persist in administering small doses of the drug after the

total disappearance of all perceptible symptoms of constitutional syphilis, in the hope of "thoroughly eradicating the syphilitic virus" by this process.

Either of these precautions is about as idle as the no less popular plan of continuing to administer arsenic in cases of (simple) psoriasis long after the eruption has disappeared, with the view of preventing any future attack by removing in this way any "lurking traces" of the disease that may remain in the system. For clinical experience shows very clearly, both in the case of the acquired (syphilitic) diathesis as well as in that of the (peculiar) congenital diathesis, on which psoriasis may be assumed to depend, that this anticipatory medication is valueless as a means of warding off future manifestations of the constitutional taint.

In the administration of mercury as an antisyphilitic, it is important to bear in mind that it is far better to give too little than too much.

In the earlier and more tractable manifestations of constitutional syphilis, such as the papular and squamous syphilides, it will usually be found, if the drug be administered in moderate doses, that the eruption will begin to fade very perceptibly before the gums begin to be affected, and in such cases it will rarely be found necessary to push the remedy to the extent of affecting the gums at all. So long as the eruption continues to fade, the drug should be withheld until the stationary condition of the eruption again demands its use. Indeed, in all cases it is preferable to fall back on the eruption as our guide in regulating the use of mercury, rather than push the use of the remedy to the unnecessary extent of affecting the gums, in order that they should serve as an indication of its effect.

Accordingly, in the tertiary manifestations of syphilis, which under any circumstances cannot be made to disappear so speedily as its secondary and more tractable symptoms, mercury should be given in still smaller doses, and greater patience should be exercised in waiting for the first appearance of a change for the better in the character of the

eruption. When improvement, however, has once commenced, the condition of the eruption is the indication to be obeyed, provided that it be kept in mind that a far more gradual progress than in the case of the earlier syphilides is the best result that can be obtained.

As to the form in which mercury should be given, that is to say, what compound of it should be employed, and as to the way in which it should be introduced into the system, whether by the skin (inunction, fumigation), by the nostrils (insufflation), or by the mouth (inhalation, pills, mixtures), opinion is somewhat divided. But there appears to be no sufficient reason why the usual and most convenient way of taking remedies, viz. by swallowing them, should be deviated from when mercury is employed as a remedy for constitutional Syphilis; and the balance of opinion is in favour of this method of introducing the drug. It is equally in favour of choosing the green iodide, as on the whole the most suitable compound of mercury for use in this way.

The dose of the green iodide in the case of the earlier syphilides should be from a quarter of a grain to half a grain, given thrice or twice a day in the form of pill. In the later syphilides half this dose is sufficient. Should any irritation of the stomach or bowels be occasioned by the pills, the addition of a small quantity of opium (a quarter of a grain to each pill) should be made.

From the foregoing, it will be evident that the author considers mercury to be a remedy of great value in the treatment of tertiary as well as of secondary syphilis. Many, however, while fully admitting the value of mercury in secondary syphilis, consider that the remedy *par excellence* for the tertiary or later manifestations of the disease is the iodide of potassium, and that mercury in such cases is always useless, and sometimes harmful.

The iodide of potassium is, doubtless, a remedy of great value in tertiary syphilis, but it is as an adjunct to, and not as a substitute for mercury that it should be used. It is especially of value in relieving the pain of constitutional

syphilis, secondary as well as tertiary. It allays the wandering rheumatic pains that often accompany the earlier syphilides; and is of equal efficacy in the fixed aching (osteocopic) pains in the bones, and in the darting (neuralgic) pains in the temples, that accompany the later phenomena of syphilis. It is also of value in promoting the resolution of (secondary) syphilitic nodes, as well as in favouring the absorption of the plastic deposits (cutaneous and other) that are so frequently met with as tertiary symptoms. It may be given in doses of from three to ten grains, thrice daily.

The iodide of iron is, with many, a favourite remedy in tertiary syphilis, and it is a valuable adjuvant to mercurial treatment, in cases where there is much pallor and well-marked cachexia.

Cod-liver oil is useful in similar cases.

Sudorifics are believed, by many, to assist the action of mercury in syphilis; accordingly, the compound decoction of sarsaparilla, taken warm, is a favourite addition to the usual treatment. The same idea is embodied in the plan of treating syphilis by mercurial fumigations, or by warm baths containing a small quantity of corrosive sublimate. The administration of simple vapour-baths is, by some, preferred to the internal administration of sudorifics.

Whatever may be the theory on which sudorifics are adopted (whether it be, that by such means the "syphilitic virus" is sweated out of the system, or that by repeatedly determining a flow of blood to the skin, the action of the mercury is specially directed to the situation of the eruption), the use of them does not appear either to hasten the disappearance of the eruption, or to ensure the patient against a relapse of it.

It is almost unnecessary to insist on the advisability of the patient's taking care of himself while he is undergoing a course of mercurial treatment, or to say that he should avoid strong exercise, late hours, exposure to wet and cold, and should adopt a moderate and unstimulating diet.

When the health has been much shattered, a short preparatory course of treatment may be advisable before specific treatment is entered on, such as the repeated administration of mild aperients, a nourishing and stimulating diet, a course of tepid salt-baths, quinine, etc.

In cases where mercury has been taken on several previous occasions, benefit may often be obtained by the iodide of potassium given alone. The reason of this is, that after repeated courses of mercury, a certain portion of the drug often gets deposited in the metallic state in some of the tissues, notably in the liver, spleen, skin, and bones, where it may remain inert for a considerable time. The solvent action of the iodide of potassium again introduces it into the circulation, and its specific effects again become manifested.

Regarding local treatment, many authorities hold that it is useless in the management of the syphilides; and some advocate, that even the deep ulcers of tertiary syphilis should be allowed to heal by scabbing, under the influence of constitutional treatment, without any means being employed for healing the sores by the direct application of remedies to them.

These views, however, are not supported by the facts that have come under the author's observation. He has found that it is possible to heal expeditiously even extensive eruptions of tertiary syphilis, by the use of local remedies only, and that, too, without any evidence presenting itself, either during or after treatment, of the system generally being brought under the influence of the remedies applied. He is, therefore, justified in holding that local remedies are a considerable aid to constitutional treatment.

In the earlier syphilides, it will be sufficient to wash the skin well with soap and warm water daily, in order to remove the exudations that may interfere with the direct contact of the remedy with the diseased skin. But in the later syphilides, the incrustations should be softened by the application of poultices, and the ulcer first cleansed by washing it with

thin gruel, should be afterwards dried with a piece of soft lint before applying the remedy.

In the earlier syphilides, one of the best applications is an ointment of nitric oxide of mercury, the oxide being prepared in the wet way, and used in the proportion of gr. xv or 3ss, or even 3i to the ounce of simple cerate.

The later syphilides require a more stimulating application, and the addition of a small quantity of the red iodide of mercury (gr. j—v to the ounce) should be made to the ointment just described.

In infantile syphilis, the best general treatment is the administration of a grain of "grey powder" every other day. If there be much emaciation, cod-liver oil should be given also.

The local treatment of infantile syphilis should consist in the application of an ointment of oxide of mercury (the oxide made in the wet way), containing five grains of the oxide to the ounce of simple ointment.

The same ointment should be applied to mucous tubercles; and they should be painted over every second or third day with tincture of iodine, the ointment being, of course, previously washed off with soap and water.

Cauliflower vegetations are best treated with escharotics in the first place, and the application of mercurial ointment afterwards.

Nitric acid taken internally has been praised as an agent in the treatment of the syphilides. But its advocates consider it useful only in the case of the earlier syphilides. Its fame is due probably to the fact that the earlier syphilides have a comparatively short duration, and disappear spontaneously after a certain time. At all events, thus much may be said of it, that its effect, if it have any, is far more gradually produced than that of mercury.

Sarsaparilla has been vaunted as a remedy for constitutional syphilis, and enjoys a high popular repute in this capacity. But it is quite inert.

CHAPTER X.

SEBACEOUS DISEASES.

THIS class comprehends (under the generic term ACNE) a variety of cutaneous affections, of which the principal phenonemon is either an excess or an alteration in character of the sebaceous secretion of the skin, or an inflamed condition of its sebaceous follicles.

These affections, although agreeing thus far with one another, yet differ so widely in degree and in appearance, that they can scarcely be comprised under one general description. They may, however, be conveniently described under two headings: the one including such as are due to an inflamed condition of the sebaceous follicles; and the other, such as result from mere excess or alteration in quality of the sebaceous secretion.

The varieties of sebaceous disease caused by inflammation of the sebaceous follicles are,—

Acne simplex, *A. indurata*, *A. rosacea*, and *A. hypertrophica*.

Those which are caused by an excess of the sebaceous secretion are—

Acne punctata, *A. albida*, *A. oleosa*, *A. cerea*, *A. cornea*, and *A.-molluscum*.

SECTION I.—VARIETIES CAUSED BY INFLAMMATION OF THE SEBACEOUS FOLLICLES.

ACNE SIMPLEX begins by little, slightly-inflamed, elevated red points. At the centre of each a small pustule gradually

appears, of the size of a pin's head, surrounded by a red areola. The areola is not raised. The development of these little pustules is not accompanied by itching or any constitutional disturbance. After the pustule has burst, it leaves a little yellowish crust, which falls in a day or two, leaving a red stain, which slowly disappears.

Sometimes the pustule is larger than above described, and its base is somewhat elevated. In such cases it is apt to leave behind it a minute cicatrix.

An eruption of *Acne simplex* is generally accompanied with a greasy, oily condition of the neighbouring skin, and is often associated with *A. punctata*.

It is kept up by a succession of pustules, each of which lasts for about four or five days.

It is met with on the face, affecting usually the forehead and temples; on the back, between the shoulders; and on the upper part of the chest.

It occurs generally in young persons, and has hence been termed *Acne juvenilis*.

ACNE INDURATA begins by an indurated elevation, of a violet-red colour, the summit of which soon suppurates. The pustule so formed lasts for several days. The indurated base on which it rests remains for some time after the disappearance of the pustule, and when it has subsided, leaves behind it a small cicatrix.

Besides these pustules, a number of violet-coloured tubercles appear, which in the course of a week or two may acquire the size of a pea, or even of a nut. As they enlarge they soften, and on manipulation it may be felt that their contents are fluid.

These little abscesses may either point and discharge a thick curdy pus, or their contents may be reabsorbed. In either case they leave behind them small cicatrices.

With this variety are frequently associated *A. simplex* and *A. punctata*.

A. indurata is seen more commonly on the face (viz. on the cheeks) and on the back, less commonly on the chest.

ACNE ROSACEA (*A. erythematos*) occurs only on the face.

It is characterized by chronic erythematous redness, which occurs in irregularly-shaped patches, giving the skin a mottled appearance. The colour of the patches is, in some cases, a bright red; in others, purplish. This condition is often accompanied with a varicose state of the venous radicles of the skin. In long-standing cases, the skin sometimes becomes roughened, and rugous, and covered with a furfureaceous desquamation. With this variety of acne, *A. simplex* is often associated, and occasionally other varieties of acne. Its course is extremely chronic, and it lasts often for many years. It sometimes occasions a feeling of being flushed, and may even be accompanied by considerable tingling.

It is often limited to the nose, but it may affect the forehead, the chin, or the cheeks, or may be extended over the whole of the face. It is confined almost exclusively to persons in middle or advanced life, and is commoner with females than with males.

It is temporarily aggravated by mental emotion, by the ingestion of stimulants, by exposure of the face to the sun, to the heat of a fire, or to a sharp wind. It is increased, too, by indigestion, constipation, and in females by the condition of system that precedes a menstrual period; in fact, by everything that tends to congest the face.

In some cases the chronically congested state of the skin of the nose leads to an irregular hypertrophy of it (**ACNE HYPERTROPHICA**). It becomes studded with red or violet-coloured tubercles of various sizes, which may be either discrete or confluent: may be spread equably over the whole of the surface of the nose, so as to enlarge it, sometimes to double its natural size, without interfering, materially, with its shape: or may be developed only on particular parts of it, so as completely to transform it.

SECTION II.—VARIETIES CAUSED BY AN EXCESS OF THE SEBACEOUS SECRETION.

ACNE PUNCTATA (*Varus comedo*) appears as small black spots, imbedded in the skin. The affected surface looks as if a number of grains of gunpowder had been shot into it.

If the skin on either side of one of the spots be firmly compressed, a consistent filiform white or yellow substance, with a black head to it, comes out; this is popularly called "a skin-maggot." It consists of the inspissated contents of the dilated sebaceous follicle. Its black head is the result of the action of the atmosphere on the part which the gaping follicle leaves in contact with the air. The larger of these black spots is often surrounded by a small projecting ring of skin: the margin of the orifice of the dilated sebaceous follicle.

Simon (of Berlin) has discovered in these so-called "maggots" an actual epizoon, the *Acarus folliculorum*.* This parasite may be made apparent, under the microscope, by diluting the expressed sebaceous matter with warm olive-oil.

This variety of Acne is often accompanied with a shining, greasy condition of the neighbouring skin. It is seen, usually, on the face, especially on the forehead, and on the alæ of the nose. It is common, too, on the pinna of the ear; on the back of the shoulders, and on the upper part of the chest. It affects young persons. Its course is generally a chronic one. It may terminate spontaneously, either by the gradual escape of the sebaceous matter from the follicle, which slowly recovers its healthy tone, or by inflammation and suppuration of the follicle, and the discharge of the sebaceous "core" in the midst of a small collection of pus.

* This *Acarus*, however, does not appear to be in any way concerned in the causation of *A. punctata*.

ACNE ALBIDA (more commonly known as *Strophulus albidus*) occurs as minute, rounded, opaque-white, or opalescent nodules, of the size of small pins' heads, which project a little beyond the general surface of the skin, and (if the finger-tip be passed lightly over them) feel hard and shot-like. These little, white, seed-like grains are sebaceous follicles, the orifices of which have become obliterated, distended with their own accumulated, thickened secretion.

This variety of Acne is common in infants on the face, more especially on the eyelids. It occurs also in adults in the same situations; but in adult males is more commonly met with on the scrotum and under-surface of the penis.

The little grains do not occasion any sensation; they may continue indefinitely without change. Sometimes one or more of them will increase, so as to acquire the size of a pea, or even that of a bean. If one of them become accidentally inflamed, it assumes the condition described under the title of *A. indurata*.

ACNE OLEOSA.—In this variety the sebaceous matter escapes freely from the follicles in the shape of a shining oily liquid, which forms a greasy transparent film over the affected surface. The skin is somewhat redder than natural, and has a sodden appearance, and the orifices of the sebaceous follicles are considerably enlarged.

This condition of skin is met with, usually, on some portion of the face (generally the nose), or on the scalp; but it occurs also on other parts of the body. When it affects the scalp, the hairs are bathed in a tenacious greasy substance, which, towards their roots, is of an oily consistence, but gets gradually more and more tenacious towards their tips, so as to mat them together.

This variety of Acne is often associated with *A. punctata*, *A. indurata*, or *A. simplex*. It affects young persons, and follows a chronic course.

ACNE CEREÆ.—In this variety, the sebaceous secretion, instead of forming an oily film on the surface, concretes into a solid crust, which at first is soft, light-coloured, and easily

detached, but afterwards gets harder, darker-coloured, and more adherent.

On detaching the crust with the finger-nail, its under-surface may sometimes be seen to be studded with little, short, white, filiform projections, which are the contents of the sebaceous follicles, and which have been removed with it. It may be observed that the crust breaks with a waxy fracture, and that it is readily kneadable into various shapes, a character which at once distinguishes it from other cutaneous exudations.

The surface laid bare by its removal is somewhat reddened, and the orifices of the sebaceous follicles are enlarged and gaping. The skin has sometimes, too, a sodden and unctuous appearance. It soon covers itself with a fresh crust.

When the crust is hard and has lasted for some time, the subjacent skin has often a somewhat cicatricial appearance.

A. cerea is generally associated with some other variety of acne. It is situated, generally, on the face, but it is not uncommon on the scalp, where it occurs as thin dirty-grey crusts, which are apt to occasion more or less baldness. It is met with at all ages; it follows a chronic course.

ACNE CORNEA is rarer than the preceding. It appears in the form of yellow-grey, or dark-brown, conical or cylindrical projections, which are of a horny consistence. By compressing the skin at their base, they may often be expelled; so that it may be clearly seen that they are rooted in the orifices of dilated sebaceous follicles.

This condition the author has seen associated with ichthyosis cornea. It occurs on all parts of the body.

ACNE-MOLLUSCUM appears in the shape of small tumours, more or less numerous, varying in size from that of a hemp-seed to that of a hazel-nut (rarely larger), either prominent or flattened, sessile or pedunculated, usually of the colour of the skin, but sometimes tinged with pink or with brown; marked, generally, with a hilum, and containing atheromatous matter, which may be squeezed out through the hilum.

There are two varieties of the disease, the non-contagious and the contagious.

The non-contagious variety appears on various parts of the surface, in the form of minute indolent tumours, which increase very slowly in size; these are usually somewhat constricted at the base. The neck either may be thick and short, so that the little tumour is sessile; or may be narrow and long, so as to make it pedunculated and pear-shaped (A.-M. pendulum).

Some of the tubercles are rounded, plump, and of a pretty firm consistence; others are withered, flattened, and flabby.

Their surface has usually all the appearance of healthy skin; sometimes, however, it is slightly tinged with brown. In those that are plump, the skin appears a little stretched; in those that are flabby, it is thrown into folds, and has a relaxed and wrinkled appearance.

There is usually to be found at some part of the tumour, generally near the centre, but sometimes on one side, a small cæcal depression. This is more obvious in those that are plump than in those that are flaccid. In some of the former it is not cæcal, but though plugged up by a small comedo, communicates freely with the interior of the tubercule, and on compressing the little tumour, a long, thin, white worm, of inspissated sebaceous matter, may be forced out through it.

On section of one of the plump tubercles, it is seen to consist of a fibro-cellular envelope, containing an atheromatous substance. On incising a flabby one, it is found to be merely a small pouch of redundant skin, enclosing a little cellular tissue. The plump and sessile tumours are an early stage of the pedunculated and flabby ones, and are hypertrophied sebaceous follicles.

There may be only one or two, or there may be a great many of them. They do not give rise to any sensation; neither are they at all tender to pressure; nor do they in any way affect the general health.

They are more common on the trunk than elsewhere, and in the middle-aged and elderly, than in young persons or children. They have no tendency to disappear spontaneously.

The contagious variety, although it resembles the preceding in general appearance, yet differs from it in many important particulars. Thus, it is commoner in infants and young persons than in the aged. It is, as its name expresses, contagious; it is commoner on the head, neck, and limbs than on the trunk; the tubercles are of quicker growth, and their contents are of a different character.

The little tumours, which are hard, globular, and sessile, having a constricted base, vary in size from that of a large pin's head to that of a pea, or more. Their surface is smooth and shining. Their colour is either the natural colour of the skin, or slightly redder, and they are usually semi-transparent. They present, in the centre or at one side, a small grey or black depression, from which five or six linear indentations radiate, dividing the mass into imperfect lobules, and giving it the appearance of a tomato or a rock-melon.

On compressing the tumour laterally, a small quantity of a milky fluid may be made to spurt out from the depression on its surface; but the bulk of its contents remains within, unless the tumour be burst across by the pressure. If this happens, a lobulated, glistening, white, brain-like mass, of nearly the size of the tumour itself, is enucleated, and the thin membranous envelope is all that remains attached to the skin.

The tubercles are of slow growth, taking several months to attain the size of a pea. They are developed without pain or itching. After attaining a variable size they may terminate spontaneously. The little tumour either is destroyed by suppuration, or, becoming strangulated as it increases in size, sloughs off. Whichever happens, a small sore is left, which soon cicatrizes.

The affection may consist of only a very few scattered

tubercules, confined to a limited region, or it may be constituted by a great many of them extensively spread and thickly strewn. The tubercules are not developed all together, or even in crops, but follow one another in irregular succession, so that, at any given time, different tubercules will be seen in different stages.

Their favourite situation is the face, especially the forehead; but they appear, too, on the scalp, the breasts, the limbs, and the genitals, and, less commonly, on the trunk itself. They are distended sebaceous follicles.

Their contagiousness has been denied by some authors of repute, and held in doubt by others. The author has, however, met with cases where he has been able to trace the introduction of the disease into families and its spread through them so clearly to contact with affected persons, as to allow of no doubt, at least in his own mind, of its contagious character.

All the sebaceous diseases are chronic affections.

SECTION III.—CAUSATION AND DIAGNOSIS OF THE SEBACEOUS DISEASES.

Acne simplex is most commonly met with in young persons, of either sex, at about the age of puberty.

A. indurata is also common with young persons, and is rare after the age of thirty. It has been ascribed to onanism; but the robust, healthy, and vigorous appearance of the majority of those who are affected by it is by no means in accordance with such a supposition. This variety, as well as the *oily*, *waxy*, and *horny* varieties of *Acne*, may with greater propriety be referred to the influence of temperament, as being affections that are almost constantly associated with the lymphatic temperament. In persons of this constitution the skin is comparatively thick, pale, opaque, sluggish, and greasy; in fact, exhibits in a moderate degree

many of the characteristics that it presents in persons affected with these varieties of acne.

A. rosacea, which occurs usually in people of sanguine temperament, is an affection of middle age. It is occasioned and kept up by the various causes (already detailed) by which repeated flushing of the face is induced. It is commoner with females than with males.

A.-molluscum, of the *non-contagious* kind, which occurs only in middle-aged or elderly persons, appears to be favoured by the wearing of flannel next the skin, and by the neglect of ablution; while the *contagious* variety is commoner with children, and results from contact with an affected person.

The sebaceous diseases may be mistaken for various other eruptions.

Thus, *A. simplex* may be mistaken for *ecthyma* or *impetigo*. But the pustules of *ecthyma* are much larger and flatter, and are surrounded with a broader areola. In *impetigo* the pustules are confluent, and the raw surface left by their rupture exudes a plastic sero-purulent liquid, which concretes and forms thick crusts.

A. indurata is apt to be mistaken for syphilis, more especially for "*syphilitic acne*," and for "*syphilitic lichen*." But the pustules of the syphilitic affection may be distinguished from those of acne by their situation, which embraces the limbs as well as the face and trunk, by the coppery colour assumed by their bases as they fade, and by the co-existence of other symptoms of constitutional syphilis. The small tubercles of the papular syphilide are to be known from those of acne by similar tests, as well as by the nature of their contents.

A. rosacea, when it is attended with desquamation, may be confounded with *eczema*, or with *pityriasis*. But in *eczema*, itching is a more prominent symptom; there is more desquamation, and the surface is moister; the eruption, moreover, is rarely confined to the face. In *pityriasis* of the

face, the affected skin has a tawny-red rather than a purplish-red hue, and there is no enlargement of the venous radicles of the skin; the desquamation, too, is more abundant.

A. tuberculata may resemble "*syphilitic lupus*," or (scrofulous) *lupus*. But the tubercles of the syphilide are more translucent, their surface smoother, and the orifices of the sebaceous follicles are not enlarged; the diseased skin has a tendency to ulcerate, and become covered with a thick crust, on detaching which a ragged deep ulcer is laid bare. The scrofulous tubercles may also readily be distinguished from those of *A. tuberculata* by their tendency to ulcerate, and become covered with a crust which conceals an ulcer.

The secretion of *A. oleosa* is to be distinguished from ordinary sweat by its shining surface and oily consistence.

The crusts of *A. cerea* may be distinguished from those of *impetigo* by their greasy nature and their malleability.

As regards *A.-molluscum*. The constricted base, the indolent character, and the chronic course of the little tumours, the nature of their contents, and the presence of a hilum on their surface, suffice to distinguish them from any other elevations on the skin.

SECTION IV.—TREATMENT OF THE SEBACEOUS DISEASES.

In *Acne simplex*, when the pustules are surrounded by deep-red, somewhat elevated areolæ, and the patient is of sanguine temperament, the administration of saline laxatives will be requisite. The diet should be moderate in quantity, and of an unstimulating kind. Vapour-baths, or the vapour-douche, should be employed in the first instance, and afterwards weak spirituous lotions. When the inflammatory character of the rash has subsided, a dilute solution of corrosive sublimate (gr. j or ij ad ʒj) applied tepid will complete the treatment. When the eruption occurs in females

at the age of puberty, in whom the menstrual function is imperfectly established, aloetic purgatives and warm hip-baths will be proper.

In *Acne indurata*, if the pustules be small, the frequent application of the tepid sublimate-solution will sometimes suffice. But in the majority of cases more stimulating applications will be required, such as sulphur-ointment (3j to ʒss of sulphur to ʒj of simple ointment). Ointment made with precipitated sulphur is preferable to that made with sublimed sulphur. Ointment of the iodide of sulphur (a favourite remedy) may be used if preferred. If the pustules be large and interspersed with livid, suppurating tubercles, more decidedly stimulating applications will be called for. One of the most convenient is an ointment of the red iodide of mercury (gr. v—xxx to the oz.). The application of this should be continued until the surface has become moderately inflamed. In a few days' time, when the inflammation has subsided and the effect of the ointment can be judged of, its use should be resumed if necessary, and so on until the eruption has completely disappeared. In such cases recovery will be greatly hastened by opening the larger of the tubercles with the point of a lancet, and expressing their curdy contents. Most cases of this variety of acne are associated with an habitually constipated condition of the bowels. When this is the case, moderate but regular purgation materially aids the local remedies in subduing the eruption. In many cases indurated acne is associated with manifest indications of a scrofulous constitution. Such cases are benefited by moderate doses of cod-liver oil, with some chalybeate.

In *Acne rosacea*, attention must be directed chiefly to the internal disorder on which the eruption depends. If there be any disturbance of the uterine function, this will require to be corrected. When, as usually happens, the digestion is disordered, it will be necessary to rectify it; tonics should be given; the diet should be selected, and the bowels regularly acted upon if necessary. If the patient be

of sedentary habits, regular and active exercise should be enjoined. In *some* cases, even amongst ladies of good position, habitual intemperance is the cause of the eruption; in such cases, very little progress can be made unless the habits of the patient can be controlled.

The local treatment of *Acne rosacea* should consist in the application of astringents and moderately stimulating substances, such as tepid eau-de-Cologne and water, camphor-cerate, or weak tepid lotions of corrosive sublimate, of the acetate of lead, or of tannin. When there is much thickening of the skin, stronger remedies are demanded, such as those already mentioned as suited to the indurated variety.

In *Acne hypertrophica*, when the eruption appears to result from free living, the diet should be moderate and simple; saline purgatives, with steel and aromatics, should be prescribed; and regular exercise be enjoined. Any of the tubercles that appear to be suppurating should be pricked with a lancet, and any distended and gaping sebaceous follicles should have their contents squeezed out. When the hypertrophy of the skin is not very considerable, moderately stimulating applications, such as sulphur-ointment, will suffice; but when the skin is greatly thickened, such stimulation as, for example, is effected by a red iodide of mercury ointment, is requisite to anything like speedy recovery.

In *Acne punctata*, when the gaping follicles are not very numerous, their contents should be squeezed out, and some stimulant or astringent application be made to them, such as a strong solution of sulphate of zinc or of alum, or a little undiluted eau-de-Cologne; but when the punctate eruption is copious, other means must be had recourse to for unloading the follicles of their accumulated secretion. Bathing the affected surface with aromatic vinegar, or with a dilute solution of potash, or with benzine, favours the expulsion of the sebaceous matter; gentle friction of the surface with a smooth piece of pumice-stone does so too. The vapour-bath and the vapour-douche have the effect of softening the

inspissated secretion. But, however much the contents of the follicles may be acted on, whether by chemical or mechanical means, the over-distended follicles having lost all contractile power, are unequal to the task of expelling their secretion. The only effectual way of compressing them when they are at all numerous is by exciting such a degree of inflammation in the skin as shall produce palpable swelling; and then the distended substance of the skin, exerting an equally diffused and sustained pressure on the over-gorged follicles, will completely empty them of their contents. For this purpose, various stimulants may be employed: moderately strong creasote ointment; a mixture of croton with olive oil; cantharides ointment, etc. When the follicles have been thus unloaded, they should be encouraged to contract to their normal calibre, by the daily application of some mildly stimulating or astringent substance. At the same time, general measures adapted to give tonicity to the skin should be adopted, such as the administration of chalybeates, and of occasional laxatives, and the regular use of the cold bath.

In *Acne albida*, the little tumours (if a source of discomfort or disfigurement) should be pricked with the point of a lancet, and then enucleated by pressure made with the thumb-nails.

In *Acne oleosa*, the use of astringent lotions has been recommended, but the persistently greasy condition of the surface prevents them from coming into actual contact with the skin. It is, therefore, necessary to wash off the oily film by means of benzine, each time before they are applied. Solutions, either of tannin, alum, sulphate of zinc, or acetate of lead, may be used; but mixtures of creasote with oil, or of a small proportion of hepar sulphuris, with soft soap, are preferable applications.

In *Acne cerea*, the crusts should first be washed off by means of soft soap, and then sulphur ointment should be used.

In the non-contagious variety of *Acne-molluscum*, if the

tubercles are plump, firm, and of but small size, their sebaceous contents should be pressed out, the orifice having been enlarged, if necessary, with a lancet; after this, the Ung. Hyd. Iod. Rub. should be applied once or twice, so as to cause inflammation of the enlarged follicle. In other cases, the little excrescences should be snipped off with a pair of scissors.

If the contagious variety of *Acne-molluscum* have appeared in a family or school, care should be taken to isolate the children that are affected from the rest, until the disease have disappeared. When the tumours are few, each of them should be incised with a lancet, and their contents enucleated by gentle pressure; the spots should then be touched with nitrate of silver. When, from the number of the tubercles, this mode of treating them is inconvenient, the application of some ointment that is decidedly stimulating should be had recourse to: the Unguentum Iodi, or an ointment of the green iodide of mercury (gr. x to the oz.) is a suitable application for the purpose.

CHAPTER XI.

ANIMAL-PARASITE DISEASES.

THE morbid conditions of the skin, occasioned by the irritation set up by animal parasites, are Scabies and Phthiriasis,—the former being due to the presence of the *Acarus scabiei*, or itch-mite, in the substance of the epidermis; and the latter to the presence of various species of *pediculi*, or lice, on the surface of the skin.

SECTION I.—SCABIES.

Scabies or “the Itch” usually makes its appearance in from ten days to a fortnight after it has been communicated.

It commences with itching. This is at first limited to the hands and forearms, and the lower part of the belly and upper part of the thighs; but it soon becomes general. The itching is at first felt only towards the evening. The eruption of scabies, which varies in character, will be best described as different diseases of the skin, which may be caused by the *Acarus*. These are as follows:—

A pruriginous eruption.—This is the most frequent of all. It occurs in the form of minute papules sprinkled loosely over the surface of the skin (not clustered together as in lichen), exuding from their tops minute drops of serous blood, which concrete into small reddish crusts. The exudation is due, as in lichen, to the excoriation of the tops of the papules by the scratching of the patient. This condi-

tion of the skin is to be looked for chiefly on the palmar aspect of the forearms, on the abdomen, and on the anterior and inner surfaces of the thighs.

A vesicular eruption.—This appears in the form of small rounded elevations of the cuticle containing clear lymph scattered loosely over the surface of the skin, varying in size from that of a pin's head to that of a split pea, or even larger, and surrounded often with a rosy-red areola of inflamed skin. These vesicles occur on the hands and feet, but more especially on the hands, where they are to be met with chiefly on the backs of the webs of the fingers, on the lateral surfaces of the first phalanges of the fingers, on the back of the thumb and of the web of the thumb, and on the front of the wrist. The vesicles are not so constant a symptom of the presence of the itch-insect as the papules. They are absent in about twelve per cent. of the cases of scabies.

A pustular eruption.—The description that has been given of the vesicles will apply equally to the pustules as regards their shape, their size, their arrangement, and their situation; but, besides occupying the situations common to themselves and to the vesicles, the pustules are to be found also on the nates. They differ from the vesicles only in being opaque and yellowish, instead of exhibiting a pearly transparency, and in being surrounded with a more decided inflammatory areola.

In addition to the above, eruptions having all the characters of *eczema*, or of *impetigo*, often form part of the disease. These are to be observed usually about the wrists and ancles, in the flexures of the elbows and knees, and in the female on the breasts. *Furunculi* sometimes occur on the nates, and the author has occasionally met with cases of Scabies where an extensive *urticarious eruption* (although the patients had never experienced an attack of urticaria before) formed the most prominent feature of the disease.

Besides the above-detailed eruptions, there is another symptom of Scabies which, though less obvious than any of

the preceding, is of infinitely greater importance, since it is not only most constantly present, but, once recognized, is pathognomonic of the disease. The symptom referred to is the track left by the female acarus in its passage through the substance of the epidermis, "*the acarian furrow*," as it has been termed. This presents the appearance of a curved dotted line under the surface of the epidermis, varying in length from the thirtieth to the third of an inch, and assuming the form of a comma, of a horseshoe, or of the letter S. It may be either white or of a greyish colour. At one extremity of the furrow is a minute, rounded, opaque, white elevation, the "*acarian eminence*;" from this, with a little address the acarus itself may be extracted on the point of a pin.

Scabies rarely attacks the face or scalp.

It is most frequently met with amongst the poor; but the middle and upper classes are not altogether exempt from it. It is commoner with children than adults, and with men than women. Its only exciting cause is the presence of the *Acarus scabiei*, in the substance of the epidermis. It is communicated by the transference of the ova of the acarus from one person to another.

If not submitted to suitable treatment, the disease may continue indefinitely, but under the influence of appropriate remedies it speedily disappears.

Scabies is very liable, on account of its varying aspect, to be mistaken for other eruptions, but it is of special importance that this eruption should be readily distinguished from others, on account of its extremely contagious character.

In no other eruption is any mark on the skin produced that at all resembles the acarian furrow. To the practised eye the discovery of an acarian furrow is as conclusive a proof of Scabies as even the extraction of an acarus from the end of the furrow, and an inspection of the acarus through the microscope, could be. In the adult, the acarian furrows are to be sought for in the epidermis of the hands, but in the infant they are as visible on the feet as on the hands.

But, independently of the acarian furrow, there are certain peculiarities of Scabies which enable it to be recognized without any difficulty in, at all events, the majority of cases.

The existence of a pruriginous eruption on the inner surfaces of the forearms, on the abdomen, and on the anterior and inner surfaces of the thighs; and

A discrete vesicular eruption of the hands and feet; or

A discrete pustular eruption of the hands, feet, and nates.

A confluent, vesicular, or pustular eruption of the flexures of the knees and elbows, of the front of the wrists, of the folds of the groins, and of the hollows of the axillæ.

An assemblage of such symptoms, or even of the first two of them, is usually enough to go upon, and a union of the first two occurs in most cases of Scabies.

Still it will sometimes happen that the acarian furrow is not to be met with. When this is the case it will generally be found (in cases which turn out to be nevertheless Scabies) that the patient has had previous imperfect sulphur treatment. Whenever a case presents itself that has not had previous specific (sulphur-ointment) treatment, and yet presents no appearance of an acarian furrow under the scrutiny of a practised eye, presumption is strongly in favour of the case not being one of Scabies.

The pruriginous eruption may sometimes resemble prurigo senilis. The vesicular eruption may appear like eczema of the hands. The pustular eruption may resemble impetigo of the hands, or ecthyma of the nates, and the patches of eruption in the flexures of the joints may resemble either eczema or impetigo.

Prurigo senilis, however, occupies chiefly the back of the shoulders, the outer surfaces of the upper arms, the loins, and the *outer* surfaces of the thighs. It *never* affects the fingers. The itching occasioned by it is far more severe than that of Scabies. Its minute scabs are larger and of a darker colour than those which tip the papules of Scabies. The pediculus corporis is to be found on the under-clothing.

In *eczema* of the hands the *dorsal* surfaces of the fingers are more affected by the eruption than their lateral surfaces.

Impetigo of the hands usually occurs in circumscribed patches.

It may be stated generally that if an eruption have lasted two or three weeks, and still remain confined to one region, it is not likely to be Scabies, which is an eruption that soon becomes general.

Scabies usually commences on the hands or forearms. If the patient relate that his eruption began elsewhere, the probability is against its being Scabies.

TREATMENT.—Various remedies have been recommended for the treatment of Scabies: stavesacre, iodide of sulphur, essential oils, mercury, iodide of potassium, benzol, and a host of others.

But the remedy that is generally employed is sulphur, and this substance has long been considered as the most efficacious agent that can be employed in the treatment of Scabies. It enjoyed this repute long before it was known that the efficacy of sulphur as a cure for the itch depended on its poisonous effect on the *acarus*, and its reputation as an "itch specific" is as great in the present day as it ever has been.

Several ways of administering it have been proposed. Some give it internally, some internally and externally; but most writers are agreed that it is necessary only to administer it externally.

As to the extent of surface over which it should be applied, differences have arisen. Some authorities consider that its application should be limited to the parts affected with eruption. Others think it should only be applied to the regions where the *acarus* is visible, viz. the feet and hands. But the balance of opinion is justly in favour of applying the sulphur to every part of the skin that is liable to be affected by the eruption of Scabies.

The mode of applying the sulphur has been a matter for

discussion. Some prefer it as a fumigation, and some as a lotion, but most apply it in the shape of ointment.

The composition of the ointment has been a subject of debate. The unguentum sulphuris of the late London Pharmacopœia was composed of one part of sublimed sulphur and two of lard. This was an unnecessarily strong ointment. The unguentum sulphuris compositum of the same Pharmacopœia contained a fifth part of sublimed sulphur, a fifth part of soft-soap, a sixteenth part of white hellebore, and a two hundred and fortieth part of nitrate of potash. This was too irritating a compound. The unguentum sulphuris of the British Pharmacopœia consists of one part of sublimed sulphur and four parts of benzoated lard. These are suitable proportions. But the ointment is more efficacious if precipitated be substituted for sublimed sulphur: the former is in a much more finely divided state than the latter; and the old objection to the employment of precipitated sulphur, viz. the very extensive adulteration of it with sulphate of lime (to the extent even of 50 or 60 per cent.), is no longer valid, since the precipitated sulphur is now sold in a state of almost perfect purity.

The length of time required for treatment by ointment made with the sublimed sulphur, and the relapses that occasionally take place, even after a prolonged use of it, have led some observers to seek after means of rendering it more speedy and certain in its action. The plan which has met with most favour is to mix with the ointment a small quantity of the subcarbonate of potash: about a drachm to the ounce of the Ung. sulph. P. B. is the proper proportion. The potash, by softening the cuticle, promotes the action of the ointment. A preferable plan, however, in the estimation of the author, is to use a small quantity of the hepar sulphuris in place of the subcarbonate of potash.

A very efficacious remedy in the "balsam of sulphur"—a solution of sulphur—is warm olive-oil.

Glycerine is sometimes used, in the place of lard, as a vehicle to mix the sulphur with. But lard is, for many

reasons, a far better substance for the purpose than the at present somewhat overrated glycerine.

Whatever form of sulphur-ointment be used, the following rules should be observed in the treatment of Scabies :—

Before applying the ointment, every part of the body, excepting the head and face, should be thoroughly washed with soap and water. For infants and young children mild (neutral) soap should be used; but for adults strong (alkaline) soap is necessary, "soft-soap" answering the purpose very well.

After a thorough soaping of his skin, the patient should take a warm bath, remaining in it for about half an hour.

On emerging from his bath he should be thoroughly dried with warm towels, and then the ointment should be rubbed well in over every part of him, excepting only his head and face.

After he has been thus thoroughly anointed, he should put on linen or cotton—not flannel—underclothing next his skin, and keep the same underclothing on for two days and two nights without change. At the end of this time the ointment should be re-applied in the same manner and with the same preliminaries as before.

If the ointment used be an efficacious one, and the treatment be energetically pursued, two or three applications will suffice to eradicate thoroughly the disease.

When itch has broken out in a family, it is important that all the members of the family who have contracted it should be treated simultaneously, and that those who have apparently escaped contagion should be watched for at least a fortnight after treatment has been commenced with the others. For it should be remembered that the disease has its period of incubation, and that the freedom from eruption of a person who has been very recently exposed to the contagion of Scabies is no proof that he has not contracted the disease. It will be obvious that the popular plan of

submitting to treatment only such children of a family as are suffering from the complaint, disregarding the others, and then, after the former are well, of having to find out that the disease has become sufficiently developed in another child to demand interference, is merely to perpetuate the disease indefinitely in such a family.

SECTION II.—PHTHIRIASIS.

Phthiriasis, or “louse-disease,” may be occasioned by the *Pediculus corporis*, or body-louse; by the *Pediculus capitis*, or head-louse; or by the *Pediculus pubis*, or crab-louse.

ERUPTION PRODUCED BY THE *PEDICULUS CORPORIS*.

The eruption produced by this parasite has already been described (under the heading of Prurigo), by the title of Prurigo senilis. It remains to be stated here, that the *pediculus corporis* is not always easy to be found; and this is probably the reason why this parasite is not generally supposed to play the frequent part in the causation of cutaneous disease, that the author's researches have led him to credit it with.

On stripping a person affected with prurigo senilis, it would not occur to any one who was unaware of the fact, that the disease was produced by a pediculus. The pediculi are rarely numerous enough to arrest the eye; and more than this, even a careful scrutiny of the skin, including in the survey the parts of it that are most affected with eruption, will, in the majority of cases, fail to detect the presence of a parasite; not even a *nit* is to be seen on any part of the skin, or on any of the hairs growing from it. Now the *pediculus capitis* and the *pediculus pubis*, in cases where the insect itself is not easily to be found, may always be readily detected by means of the nits attached to the hair of the part they inhabit. It is not to be wondered at

then, that the part played by the *pediculus corporis* should have been so often overlooked.

The parasite lives, not on the skin, but on the under-clothing.* It is on the inner surface of the undermost article of clothing, whatever it may be, that the parasite is to be sought for, and here it is not always very easy of discovery. As already stated, the pediculi are rarely to be found in numbers; a very few of them are capable of causing very severe irritation. A careful investigation of the patient's shirt may lead to no result, and yet his disease be due solely to the pediculus. The parasite nestles in the "*gathers*" or "*folds*" of the shirt. These are most numerous in a man's shirt, at below the back of the collar of the shirt; and hence it is, that in men the disease is usually most severe on the back of the shoulders, and always more severe on the shoulders than on the chest. In women (whose undergarments are arranged differently) the eruption is commonly as severe on the breast as it is on the back of the shoulders. At and below the waist, where the shirt is again thrown into folds, the pediculus again establishes himself, and, accordingly, the loins and upper part of the thighs are also common situations of the disease.

The nits of the pediculus are also to be found in the same situations, but occasionally a large cluster of them is to be found at some other part of the shirt.

The *pediculus corporis* affects men and women indifferently, and is to be met with in persons of all ages, but it more commonly infests adults than children, and is commoner with aged persons than with adults.

ERUPTION PRODUCED BY THE *PEDICULUS CAPITIS*.

This parasite occupies only the hairy scalp, and gives rise to eruptions of the scalp and of the neighbouring skin.

It lives in the hair. The *pediculus corporis*, as we have

* It is, of course, not to be understood from this that it does not feed on the skin. It lives upon blood just as the flea does.

just seen, lives in the underclothing. But although it inhabits the hair of the head, it never invades the hair of the whiskers, beard, moustache, eyebrows, axillæ, or pubes, all of which situations, however, are liable to become infested by another kind of pediculus.

The favourite habitat of the *pediculus capitis* is the *occipital* part of the scalp. Here it is always to be found in greater numbers than at any other part of the scalp; and here it is (in cases where the nature of a scalp-eruption may become a question) that evidence of the presence of a pediculus should be sought for.

In cases where the hair is thick and the pediculi, being few, are therefore not immediately visible, their presence may at once be discovered by the existence of nits (the ova), sticking in numbers on to the hairs. The nits are readily to be distinguished from scurf by their oval outline and their firm attachment to the shaft of the hair. They are to be found deposited in rows on the hair, and are sometimes arranged so closely as to give the hair a moniliform appearance.

In children, the *pediculus capitis* is of far more common occurrence than it is in grown-up persons. In the child, the eruption produced is generally *impetigo* of the scalp.

Some writers, who admit that the *pediculus capitis* may be concerned in the production of *impetigo* of the scalp, offer no suggestions for distinguishing between the *impetigo* arising from this cause and *impetigo* of constitutional origin, and are evidently unaware of any difference existing between the one and the other.

Some appear to think that *impetigo granulata* is the particular eruption that is caused by the head-louse. The author's researches have, however, shown him, that the essential difference between the constitutional and the parasitic eruption is, that while the former almost invariably affects the anterior half of the scalp more severely than the posterior half, the parasitic eruption is always more developed over the occiput than it is at any other part of the scalp.

It must be remembered, however, that the presence of pediculi on the head of a child by no means invariably produces an eruption of impetigo. It is not a rare thing, in public practice, to meet with children whose heads are so thoroughly infested with pediculi, as to lead to the inference that the latter are inhabitants of old standing; and yet in such cases there is often no eruption of the scalp, except a scanty pruriginous one, the patient may state that he experiences scarcely any irritation, and his parents say that he scarcely ever scratches his head.

Pediculi capitis are less commonly to be met with in grown-up persons than they are in children, and, either in men or in women, their presence less commonly provokes any eruption (further than a scanty pruriginous one).

The author has observed that the eruption commonly produced in adults by the pediculus capitis is *not* an eruption of the scalp. The portions of skin most affected are those that are covered by the depending hair of the scalp, and the eruption is abruptly limited above by the margin of the scalp, and below by the ends of the depending hair. The character of the eruption is generally purely lichenous (circumscribed lichen); but it sometimes, though very rarely, assumes the form of eczematous lichen. The situations occupied by the lichenous eruption are, the temples, the ears, and the upper part of the back of the neck.

ERUPTION PRODUCED BY THE PEDICULUS PUBIS.

While the pediculus capitis may be considered as more especially the pediculus of children, and the pediculus corporis as the pediculus of old persons, the pediculus pubis may be regarded as the pediculus of adolescents.

The pediculus corporis, as we have seen, attacks parts of the surface that are comparatively hairless, and appears to avoid those parts of the skin that are thickly covered with long hair.

The pediculus capitis and the pediculus pubis, however,

attack only such portions of the skin as are pretty thickly covered with hair. The *pediculus capitis*, as we have already learnt, limits itself to the hair of the scalp.

Now, all the rest of the longer hair of the body is the domain of the *pediculus pubis*, viz. the pubic hair, the hair of the abdomen and chest, the hair of the axillæ, the beard, whiskers, moustache, eyebrows, and eyelashes.

In the child the habitat of the crab-louse is limited to the eyebrows and eyelashes. A case of this kind lately came under the author's observation.

The stronghold of the *pediculus pubis* in the adult is the pubic hair. Here it is found in greater numbers than it is elsewhere, and here it is that it makes its first appearance.

The *pediculus capitis*, as we have seen, lives on the hairs, and deposits its eggs on the hairs. The *pediculus corporis* lives on the clothes, and deposits its eggs on the clothes. Now the *pediculus pubis* lives on the skin, and deposits its eggs on the hair.

The flat crab-like insect lies closely attached to the skin, and if any attempts be made to detach him, he immediately digs his claws into the epidermis, and anchors himself so firmly to the skin that it requires the exercise of some force to pull him off. The *pediculus capitis* crawls about the hairs, nestling between them; accordingly we find its ova deposited as often near the free ends of the hairs as near their roots. But the ova of the *pediculus pubis*, which keeps close to the skin, are always deposited on the hairs very near to their roots.

The eruption provoked by the *pediculus pubis* is a pruriginous one. It is often so severe as to simulate *prurigo senilis*. But the fact of the situations occupied by the eruption corresponding to the habitat of the *pediculus pubis*, the discovery of that insect on the skin and the presence of its nits on the hair, will always suffice to distinguish pubic from senile *prurigo*.

Louse-disease, in either of its three forms, may last indefinitely, if unchecked by appropriate means. But if recog-

nized, and submitted to appropriate treatment, it may always be speedily remedied.

TREATMENT OF PHTHIRIASIS.—Various remedies are used, all having for their object the extermination of the pediculus. Amongst them may be mentioned the powder of *Staphisagria*-seeds, the powder of the flowers of the *Pyrethrum album*, or of the *Pyrethrum roseum*, olive- or almond-oil, sulphur in shape of fumigation or ointment, mercury in aqueous solution, as a fumigation or in ointment, turpentine, the various essential oils, etc.

Of the 'powder' of *Staphisagria*-seeds (one of the most efficient of the above-mentioned remedies) it may be said, that it is at best but a clumsy contrivance. The seeds are incapable of being reduced to anything like powder. The most skilful drug-grinder cannot produce with them any better product than a coarse meal, much like linseed-meal,—an utterly unmanageable application for the purpose, unless, indeed, a poultice were to be made of it. Finding that this meal contained a certain amount of oily matter, the author had the oil removed from a small quantity of the meal by percolation with ether, and found that the meal was then capable of being reduced into a fine powder. He employed this powder in several cases of Phthiriasis, and found it quite inert. On inquiring what proportion of oil had been extracted from the meal, he found that it amounted to as much as one half (by weight) of the meal. On making trial of the oil, suitably diluted with olive-oil, he found it as efficient as any remedy he has ever tried against Phthiriasis. A cheap way of preparing the oil for application, is to digest the seeds in melted lard and strain while hot. The filtrate is an ointment of the seeds of *Stavesacre*. Two drachms of the bruised seeds should be used to an ounce of lard.

The powder of the flowers of the *Pyrethrum* is, in the author's experience, a much less efficacious remedy than the *Stavesacre*.

Olive- or almond-oil acts only in a mechanical manner.

By forming a film over the pediculus, they occlude its spiracles, and so asphyxiate it. Unless applied very abundantly, they are but uncertain remedies.

Turpentine is objectionable on account of its strong odour, and its irritating effect on the skin.

The essential oils are of uncertain efficacy.

Sulphur is not nearly so efficient a remedy as mercury, which is, indeed, on the whole, a preferable remedy to any that have been mentioned. Those who are afraid to apply it over a large surface of skin, for fear of producing its effects on the system, can use the ointment of the oil of Stavesacre, which is scarcely at all less efficacious, but which sometimes irritates the skin. But such fears are groundless. It is not necessary to *rub in* the mercurial ointment; all that is needed is, that it should be lightly *smeared* over the affected regions, and there is no occasion for using a strong ointment.

The author, who has treated many hundred cases of Phthiriasis with mercurial ointment, has not in a single instance occasioned any of the symptoms of mercurial absorption. The preparations that he generally employs are the Unguentum Hydrargyri Mitius of the Dublin Pharmacopœia, an ointment containing ten grains of the oxide of mercury to the ounce, or citrine ointment mixed with an equal quantity of lard.

CHAPTER XII.

VEGETABLE-PARASITE DISEASES.

THE eruptions caused by the growth of vegetable parasites on the skin are *Tinea favosa*, *Tinea tonsurans*, *Tinea decalvans*, *Sycosis*, and *Chloasma*.

SECTION I.—TINEA FAVOSA.

TINEA FAVOSA, or *Favus*, or the *Honeycomb ringworm*, a disease that is caused by the *Achorion Schönleini*, begins with itching and redness of the skin, and with a furfuraceous desquamation of the cuticle. At the same time the hair loses its polish, and becomes more or less brittle.

Soon small, isolated dry yellowish crusts not larger than a pin's head make their appearance; these, as they extend at their circumference and increase in thickness, become depressed at their centre; very often a hair passes through the middle of the depression. These sulphur-yellow "favus-cups" are pathognomonic of the disease; they are generally pretty numerous, and are commonly surrounded by an areola of inflamed skin. Their size does not usually exceed that of a split pea.

In this condition the disease has been called *Favus lupinosus*, on account of the supposed resemblance of the small "cups" to the seeds of lupines. When sufficiently

near to one another they may meet at their circumference, still retaining much of their original form; in such cases their rounded margin is pressed into a hexagonal shape; and the cup-like depression in the several crusts remaining, the surface bears some likeness to the cross section of a honeycomb. This appearance has given origin to the name of *Favus*.

After a certain time, this honeycomb aspect is altered by portions of the cups getting detached, so that their depressions become obliterated. Their colour, however, remains unchanged. In this stage the incrustation forms large irregular yellow patches (*Favus scutulatus*).

Later still, the crusts lose their yellowness, and become white, friable, and uneven, so as to resemble very closely, in colour and consistence, as well as in the conformation of their surface, the pieces of crumbling mortar that fall from old walls; in this state the disease is termed *Favus squarrosus*.

If in the early stage of the complaint one of the favus-cups be carefully detached, there will be seen a smooth shining concave depression in the skin, somewhat red, but without abrasion. At the same time, it may be observed that the under surface of the cup is convex, and is much smoother and of a deeper yellow colour than its free surface.

Coincidentally with the development of the crusts of *Favus*, a further change, beyond what has been already mentioned, is undergone by the hair; the greater part of it falls off, but what remains loses colour, and becomes short and woolly.

The head of a person affected with *Favus* exhales a peculiar fœtid odour, which has been variously likened to that of mice, of animal tissues undergoing maceration, or of the urine of cats.

Upon examination under the microscope, the favus-cups will be seen to be almost entirely made up of parasitic matter. This consists of (a) an amorphous, homogeneous, finely granular *stroma*; (b) narrow sinuous ramified tubules, containing molecular granules (the *mycelium*); (c) broader

(*sporoforous*) *tubules*, containing minute rounded cells, or elongated cells, placed end to end, so as to give the tubules a jointed appearance; (*d*) *spores*, some free, others joined end to end like a string of beads. The stroma and mycelium are found in greatest abundance towards the lower (convex) surface of the favus-cup, while towards its concavity the cup consists chiefly of sporules. With the parasitic matter is a scanty admixture of epithelium cells.

If the diseased hairs be submitted to microscopical examination, the filaments and spores of the *Achorion Schönleinii* will be found also in the substance of the stem, and of the knob of the hair, as well as in its root-sheath.

Besides the symptoms above described, there are other phenomena which are to be regarded rather as accidental complications, than as essential conditions of the disease. Thus, not unfrequently, the pustules of ecthyma or the crusts of impetigo are to be seen mingled with the favus-cups. And in the majority of cases, the head is at the same time found swarmed with lice.

Favus attacks ordinarily the hairy scalp, but it is to be found also on any part of the skin that is furnished with hairs, however rudimentary these may be. It occurs also on the nails. Wherever it presents itself it exhibits the same characters.

Favus is, in this country, one of the rarest of the diseases of the skin. It is confined to no special period of life, but it appears for the first time most commonly between the ages of six and ten. It affects especially children of lymphatic temperament—the poor oftener than the rich. Its only exciting cause is contagion.

When taken early, Favus is a curable disease, but after it has existed for some time it occasions incurable baldness, through atrophy of the hair-follicles. When it has lasted for several years it produces general pallor, emaciation, and debility.

Favus is liable to be mistaken for impetigo, for psoriasis, for tinea tonsurans, or for tinea decalvans.

However, in no other disease than Favus are the characteristic spores and mycelium of the Achorion Schönleinii to be found in the substance of the hairs and of the epidermis.

In *impetigo* of the scalp (the disease with which Favus is most likely to be confounded), the crusts are of a brownish rather than of a yellowish (as in *F. lupinosus*) or a whitish (as in *F. squarrosus*) colour. They are not cup-shaped at the beginning, nor do they, later on, assume a white powdery appearance. The odour exhaled by an impetiginous scalp, although often very offensive, has not that peculiar mousey quality that is characteristic of Favus. The hair is not so easily extracted. There are no bald spaces. The crusts are of a moister character. When there is (secondary) impetigo complicating Favus, there is generally, at some portion or other of the scalp, an unmixed patch of eruption, which exhibits unmasked the peculiar characters of Favus.

In *psoriasis* of the scalp, the incrustations are whitish, but not powdery; they are stratified and break up into scales, not into amorphous fragments. There are no cicatricial bald surfaces. The hair is not so easily extracted, and patches of psoriasis, exhibiting their special nacreous sheen, are to be found usually also over the knees and elbows.

In *tinea tonsurans*, there are no crusts and no absolutely bald patches. There are scurfy patches where the hair is broken off at the distance of about a line from the skin, but the scurf is neither yellow nor white, but of a slate-grey colour.

In *tinea decalvans*, there are no crusts, no scurf even; there are simply smooth, polished, circumscribed, bald patches, from which a fine down may on close inspection be seen growing.

TREATMENT.—The local treatment of Favus should be commenced by cutting all the hair (that remains on the scalp) so short as to leave only half an inch of its growth. This is to be done with the double object of facilitating the removal of the crusts, and of making the scalp ready for the process of epilation. The next step is the removal of the

favus crusts: this may be facilitated by a preliminary poulticing so as to thoroughly soften the crusts. But the application of lint soaked in dilute acetic acid, and covered over with oil-silk to retard the evaporation of the volatile acetic acid, answers the same purpose more readily. The acetic acid permeates the epidermic tissue in which the favus-matter is embedded, and by softening and swelling up the epithelial cells, makes the whole mass soft and easy of removal. The aromatic smell of the acetic acid, by neutralizing the offensive smell of the favus-matter, makes its use preferable to the poulticing of the favus-crusts, which is, practically, a very disgusting process.

After as much of the softened crust as possible has been scraped off, the head should be well washed, first with dilute acetic acid, and afterwards with soap and water, and it is then ready for epilation.

Epilation, or the pulling out of the hairs from the scalp, is a comparatively easy process in cases of Favus, since the hairs are much less firmly implanted in the skin than they are in the healthy state. They have not that extreme brittleness which renders epilation impracticable at first in the treatment of tinea tonsurans.

The head of the patient may be conveniently rested in the lap of the epilator, or the patient may be seated while the epilator stands behind him. A common dressing forceps, furnished with a broad straight-edged bill, is the most convenient instrument to use. The sensibility of the part about to be operated on should be diminished by means of the ether-spray, and epilation rapidly performed by seizing three or four hairs at a time with the forceps, and pulling them out in the direction of the slant of the hair at the part operated on. Care should be taken to *pull* the hair, *not to jerk* it out, since, on account of its brittleness, it is apt to break, unless traction on it be gradually made.

Several sittings will be required to effect the epilation of the whole of the scalp. After a portion of the scalp has been epilated, it should be dealt with as directed in the

description of the treatment after epilation of tinea tonsurans. Sometimes a single thorough epilation, aided by assiduous application of "parasiticide" remedies, as recommended in the treatment of tinea tonsurans, is enough. But if, after the lapse of a few weeks, the condition of the scalp appear to demand it, the epilation should be repeated.

The constitutional treatment of Favus consists merely in improving the general health in any way that may seem necessary. As a general rule, cod-liver oil and steel are indicated.

SECTION II.—TINEA TONSURANS.

TINEA TONSURANS, or the *scurfy Ringworm*, a disease that is caused by the *Trichophyton tonsurans*, presents a different aspect, accordingly as it affects the scalp, or some other portion of the skin. When situated on the scalp, it has been called distinctively "Herpes tonsurans." When occurring elsewhere, it is generally distinguished as "Herpes circinatus."

"*Herpes circinatus*" appears in the form of minute, rounded, red patches. The rosy-red patches are slightly raised. Their surface soon becomes rough, and covered with a fine dry scurf. Sometimes minute ephemeral vesicles appear on them.

The patches rapidly increase in extent, retaining their original rounded outline; but as they spread, they exhibit a disposition to heal at their centre, so that when they have existed for a few days they present the appearance of rounded patches of fading pityriasis, bounded by a narrow lichenous ring; that is to say, their margin is decidedly raised, is of a rose-red colour, is covered with a tolerably abundant furfuraceous desquamation, and sometimes with ephemeral, minute, transparent vesicles: while the area enclosed by it is of a fainter (pink) colour, is scarcely, if at

all, raised above the level of the healthy skin, is somewhat harsh, and is scantily covered by a very fine white scurf. At the centre of the patch the skin may approach still more nearly the healthy condition.

There are usually several patches of variable size, some of which may attain a diameter of several inches. The patches are commoner on the exposed than on the covered portions of the body. Thus, in adults they generally occur on the backs of the hands, on the forearms, on the neck, or on the face: in women who are suckling they are apt to occur also on the breasts, and in children they are of common occurrence on the legs and shoulders, as well as on the hands, arms, and face.

The progress of the eruption is attended with more or less itching. The scratching and rubbing that this provokes is the cause of the disease being transplanted (by the fingers) from one part of the surface to another.

"*Herpes tonsurans*" commences with more or less itching and redness of some parts of the scalp. The affected spot is sometimes also slightly swollen. The hair growing from it loses its polish, becomes dull, and is more or less discoloured; it also becomes brittle, so that it breaks off near to the root.

This breaking off of the affected hairs at the distance of a line or two from the surface of the skin gives the patch an appearance as if it had lately been shaved (hence the name of the disease). If any of these hair-stumps be pressed on by the finger-tip, their brittleness and want of elasticity are made evident by their becoming permanently bent at an acute angle by the pressure: instead of springing back again, or at the most retaining only an almost imperceptible curve, as would be the case with healthy hair-stumps.

The epidermis of the patch undergoes a furfuraceous desquamation; the hair-follicles become erect, so that a goose-skin appearance is given to the patch, the colour of which becomes changed from a rosy-red to a faint slatish hue.

The hair-stumps, as well as the intervening epidermic sur-

face, may sometimes be seen to be covered with a faint white, extremely delicate, fluffy layer, like the bloom on a peach.

The margins of the patches are, as a rule, abruptly defined.

Sometimes, especially in lymphatic subjects, successive crops of vesicles or of pustules may make their appearance on the shorn patches, which accordingly assume more or less of the appearance of patches of eczema or of impetigo.

There are generally several patches, of various size, scattered on different parts of the scalp. Sometimes, by the coalescence of several spreading patches, extensive, irregularly-shaped, shorn surfaces are formed.

If, by means of tweezers, it be attempted to pull out one of the hair-stumps, it will be found that the stump is so brittle that only a portion of it comes away, leaving the hair-root in the skin.

Under the microscope this piece of the stump appears ragged at either of its ends. Instead of breaking with a clean fracture, like healthy hair, the broken ends are digitated. The structure of the hair is greatly altered; its fibres are separated longitudinally, and the intervals filled with the spores of the *Trichophyton*. On the surface of the hair are clusters of the same spores. The magnified piece of hair looks something like a faggot of sticks, with a number of berries sticking in clusters to its sides and ends, and stuffed here and there into its interstices. The spores of the *Trichophyton* are rounded, have a well-defined outline, and measure about the $\frac{1}{5000}$ inch across.

In the earlier stages of the disease, when the hair has not yet become so brittle as to make it impossible to extract the root, it can be ascertained that the knob of the hair, as well as its root-sheath, is invaded by the spores of the *Trichophyton*.

In "*Herpes circinatus*" the spores are most readily discoverable in the epidermic scurf.

"*Herpes circinatus*" may be mistaken for pityriasis, lichen (*circumscriptus*), psoriasis (*circinata*), or favus.

But the patches of *pityriasis* are not evenly rounded; their redness is of a tawny rather than of a pink or rosy kind; they have not a raised margin, and their centre presents the same appearance as their circumferential part.

In *lichen circumscriptus* the patches are less regularly circular, the scales thicker and more harsh, and the centre of the patches as rugous as their outer portion; moreover, the patches spread much more slowly.

In *psoriasis circinata* the scales are much larger and thicker; they have a nacreous sheen; the raised ring is much broader, as well as more prominent; the reddened skin has a tawny hue; the enclosed area is either sound, or exhibits only a tawny yellow, not a pink stain; the rings enlarge far more slowly.

Patches of *favus* are not very likely to be mistaken for those of "*Herpes circinatus*," but a microscopic examination of the scales might lead to error, unless it be remembered that the sporules of the parasite that produces *favus* (the *achorion Schönleini*) are much larger, and have more of an oval shape than those of the *Trichophyton*.

The diagnosis between "*Herpes circinatus*" and any other eruption will always be assisted by a microscopical examination of the scurf.

"*Herpes tonsurans*" may be confounded with other diseases of the scalp; for instance, with *pityriasis*, *psoriasis*, *impetigo* (*granulata*), *tinea decalvans*, or *favus*.

But in circumscribed patches, either of *pityriasis*, *psoriasis*, or *impetigo*, occurring on the scalp, the hair of the affected surface, though often more or less thinned, is never broken off uniformly (as in the case of "*Herpes tonsurans*") at the distance of a few lines from the surface of the skin. The hairs, if pulled at, come away entire, root and all. The patches are not evenly rounded. The hairs do not present the microscopical appearances characteristic of "*Herpes tonsurans*."

In *tinea decalvans* the patches are completely bald, that is to say, there are no hair-stumps; there may be a few

colourless, downy hairs on the bald patches, but these are almost invisible to the naked eye; the patches are perfectly smooth and polished; they are of a dull white colour.

In *favus*, the incrustation, instead of being scanty, slate-powder-coloured, and bran-like, is abundant, thick, and of a bright sulphur-yellow character. The hairs, on being pulled, come out readily by their roots, indeed more readily than healthy hairs; and it may then be seen that their bulbs are much thicker than is natural. A microscopic examination of the hair will clear up any doubt.

The causes of *Tinea tonsurans* may be thus summarized:—(Predisposing) poverty, childhood; (exciting) the contact of the spores of the *Trichophyton tonsurans* with the skin. With regard to the predisposing causes, the first-mentioned (poverty) is not more specially a favouring condition in this than it is in other contagious diseases. The second, however (age), exercises a special and peculiar influence in the causation of *Tinea tonsurans*; thus it is in children only that the disease is met with affecting the scalp. Whereas, both in children and adults, it occurs at other parts of the surface, although in any situation it is commoner with children.

“*Herpes circinatus*” is always a trivial and transient affection; but “*Herpes tonsurans*,” if left to itself, or if treated ineffectually, may continue for a very great length of time; for example, the cases that come under notice are not uncommonly cases of two or three years’ duration. After very long continuance, the disease is apt to occasion permanent baldness, by producing atrophy of the hair-follicles.

TREATMENT.—In “*Herpes circinatus*” but little treatment is required; washing the patches with a dilute solution of acetic acid (the *acidum aceticum* P.B. answers very well), or with a little soft-soap, and drying with a rough towel is sufficient. Common black writing-ink is the popular remedy, and the acetic acid it contains makes it a very efficient one. The *modus operandi* of these remedies is that they dissolve off the semi-adherent scurf, as well as the

superficial layers of the cuticle, and so detach with the cells the parasitic growth that thrives on them. Mercurial ointments of various kinds, such as the white precipitate ointment, the nitric oxide of mercury ointment, the citrine ointment, and others, are also efficient remedies.

In "*Herpes tonsurans*," far more care than is needed by "*Herpes circinatus*" is requisite to obtain a good result.

Some authors praise the effect of a solution of sulphurous acid, the destructive influence of that gas on the lower forms of vegetable life being the reason of its employment. The solution is prepared by adding vinegar to a solution of hyposulphite of soda, a salt largely manufactured for the use of photographers, and much easier to obtain than the sulphite. The resulting solution of sulphurous acid is applied by soaking pieces of lint in it, laying them on the affected places, and covering them with oil-silk, to prevent the escape of the gas. This ingenious plan, however, is, in the author's experience, far from being an efficacious one. In spite of the covering of oil-silk, the volatile sulphurous acid is dissipated so rapidly (its escape being favoured by the warmth of the head), that in a surprisingly short time after the application of the solution, the suffocating odour of the gas is hardly perceptible, and, very shortly, not the least trace of it can be smelled. The good done by the solution is, the author believes, entirely due to the excess of acetic acid used in its preparation, and to the precipitated sulphur that is formed by the decomposition of the liberated hyposulphurous acid (into sulphurous acid and sulphur).

Epilation, aided by the use of "*parasitocides*," is advocated very earnestly by some writers. They all, however, admit that until the disease has begun very obviously to improve, epilation is practically impossible, on account of the extreme brittleness of the hairs; but nevertheless advise that the ceremony should be performed regularly from the commencement until, later on, it becomes really possible to extract the roots of the hairs.

The object of epilation is to remove the diseased hair-

roots which are not very accessible to the reach of local applications, and thus to render possible the penetration of "parasiticide" remedies into the hair-follicles. But the object of simulating epilation by pinching off small pieces of the projecting brittle hair-stumps is not quite so evident.

In all cases the root of the hair (the part within the follicle) is less diseased than the shaft. It is better, therefore, if epilation be aimed at, to improve, first, if possible, the state of the shaft, so that it may regain enough of its natural tenacity to bear the strain on it necessary to extract the root. This end is best obtained by the use of some agent which is capable of penetrating the substance of the hair and destroying the parasite. These conditions are found united in a solution of the hepar sulphuris, a substance procured by fusing together equal parts of sulphur and of dry carbonate of potash, the result of which process is the formation of pentasulphuret of potassium and hyposulphite of potash. The pentasulphuret of potassium exercises the same solvent effect on the tissue of the hair that is produced by the oxide of potassium or potash, and carries the dissolved sulphur into every part of the diseased shaft, penetrating even some distance into the root of the hair, as well as into the equally diseased root-sheath. Since the hepar sulphuris is as irritating to the skin as potash, the solution to be used should be of moderate strength.

After the patches have been daily painted with the solution for two or three weeks, it will be found that effective epilation can be practised, and then other remedies requiring less care in their use are admissible; for example, sulphur-ointment (this should be made of precipitated sulphur, and should contain also a small proportion of the hepar sulphuris): or citrine ointment may be used. A favourite remedy is the nitric-oxide-of-mercury ointment; but it should be made with oxide prepared in the wet way.

In all cases, during the course of treatment the head should be daily well washed, in order to prevent, as much as possible, the formation of fresh foci of the disease.

The manner of performing epilation has been described under the heading of *Tinea favosa*. All the patches of ringworm should be thoroughly epilated, at least once. When the hair has again grown long enough to afford a good hold to the forceps, its condition should be ascertained by a microscopical examination, or (more readily) by pressing the finger-tip on the patch, and seeing whether the stumps are angularly bent by the pressure or not. If the condition of the hair-stumps seems to require it, epilation should be repeated, and so on until recovery has taken place, the ointment being well rubbed in over each of the patches every day.

It is a good plan to persevere in the use of remedies, even long after the disease has apparently completely disappeared, since unless every vestige of the *Trichophyton* have completely disappeared, a relapse of the disease is certain to happen.

When the complaint occurs in lymphatic children, some general treatment is advisable. The bowels may require to be regulated, and the diet to be selected. The administration of cod-liver oil and the syrup of the iodide of iron or steel wine may be of service,

SECTION III.—TINEA DECALVANS.

TINEA DECALVANS, or the "*smooth ringworm*," a disease that is produced by the *Microsporon Audouini*, commences (usually on some part of the hairy scalp) with slight itching. The itching is confined to a limited spot, the hair growing from which may on examination be found to have lost its natural gloss, as well as its natural firmness of attachment to the skin, since on pulling at it it readily comes off. On examining by the touch the corresponding patch of skin, it may be ascertained that it is slightly indurated.

Very soon the loosened hair falls off, and it may be seen that the disease occupies a small well-defined area which is completely denuded of hair. On a cursory view, the most striking peculiarities of the disease at this stage are, the perfect baldness of the patch, which is smoother than the most closely-shaven beard; the absence of any other notable change in the affected skin; and the abrupt manner in which the baldness ceases at the margin of the patch, the hair immediately surrounding which, is as thickly set and as long as on any other part of the scalp.

On examining more closely, however, it may be found that the skin corresponding to the bald patch is slightly thickened and indurated, is somewhat paler than the surrounding skin, and has something of a polished appearance; and, furthermore, that the hair immediately around the patch has lost its gloss and may be easily pulled out. The baldness, too, is not so absolute as it at first sight seems, for the hair that has been lost becomes very speedily replaced by a scanty crop of short, light-coloured, thin, silky filaments, which resemble the fibres of cotton or rather of fine wool, and may require a lens for their detection; while towards the margin of the patch short, thick, club-shaped hair-stumps make their appearance. These stunted hairs vary from the one-sixteenth to the one-eighth of an inch in length, and are mostly of the same colour and thickness as the healthy hairs, except at their free extremity, which is always of a much darker colour as well as much thicker than the lower portion of the stump.

If a hair be taken from any part of the skin where the disease is in active progress, *e.g.* from the edge of a bald patch which is spreading, it will probably exhibit (under the microscope) traces of the *Microsporon Audouini*. The hair should be moistened with a dilute solution of caustic potash, and viewed through a "quarter" object-glass. The spores of the *Microsporon Audouini* may be seen scattered, in the form of minute spherical granules, in the substance and on the surface of the diseased hairs.

The disease may spread from only one, or from as many as ten or even twenty independent centres. As a rule, when it first comes under observation, there are at least three or four separate patches, varying in size from that of a three-penny piece to that of a crown. Wherever the disease has lasted for any considerable length of time, the skin becomes thinned and atrophied, and the cottony fibres get very fine and scanty, or may be altogether wanting.

Tinea decalvans may assume either of two phases. In the one, which may be termed the *nummulated* variety, the patches increase but slowly, so that they may be several months attaining a diameter of two or three inches; and their form is evenly rounded, being either oval or circular.

In the other (much rarer) kind, which may be distinguished as the *serpiginous* variety, the progress of the disease is more rapid, and its extension takes place in a less regular manner; the bald patches speedily spread, so as to form large irregularly-shaped patches with sinuous margins.

Occasionally, the two varieties may co-exist in the same individual.

The nummulated variety may sometimes, by the coalescence of two or three patches, simulate in some degree the serpiginous form; but even when this happens, the margin of the patch will exhibit only two or three regular curves, corresponding to the outlines of the patches which compose it, and may be readily distinguished from the irregular border of the serpiginous variety. In the former case, too, the patient's account of himself will prove that the disease has remained for some time in the condition of separate rounded patches before the irregular patch was produced. The distinction, which may perhaps appear of but small importance, is of value in determining the prognosis, which with reference to the chances of permanent baldness, is much less favourable in the serpiginous than in the nummulated variety. Indeed, in the former the progress of the disease is sometimes so rapid and extensive, that in a few months from its first

appearance the patient may be left for the rest of his life without a single hair on any part of his body.

Tinea decalvans, when left to itself, may terminate either in spontaneous recovery or in incurable baldness. The former result, which is comparatively rare, occurs more frequently in the nummulated than in the serpiginous variety. The approach of recovery may be recognized by an arrest of the extension of the disease, by the cottony fibres gradually acquiring more and more the characters of healthy hair, that is to say, becoming coarser, longer, and of a darker colour, and by the diseased skin regaining its natural colour, and losing its induration. When permanent baldness has been produced, the induration of the skin disappears; and it regains almost, if not completely, its natural colour; but instead of remaining at its original thickness and consistence, it becomes thin and atrophied. (On the scalp and other parts where the hair is naturally coarse and thickly set this alteration becomes very manifest.) In this condition of the skin the cottony fibres become extremely fine and scanty or may be altogether absent.

In either of its forms, the disease is commoner with children than with adults. In the latter, it often coincides with recent constitutional syphilis, as if the modification of the system produced by the syphilitic virus offered a favourable soil for the development of the disease. It will be understood, that what is meant here is the veritable *Tinea decalvans*, as distinguished both from general (syphilitic) thinning of the hair, and from the bald cicatricial patches that are left by some syphilitic eruptions.

Tinea decalvans may be mistaken for vitiligo, *tinea tonsurans*, *tinea favosa*, senile alopecia, syphilitic alopecia, or for the temporary loss of hair that is often consequent on various acute illnesses.

But in *vitiligo*, although the hair be discoloured, it retains its usual length, as well as its natural degree of coarseness; there is no induration of the skin, and the paleness of the

patch itself is made up for by the unnaturally deep colour of the skin in its immediate neighbourhood; and furthermore, the disease does not exhibit that marked predilection for the scalp which is noticeable in *Tinea decalvans*.

In *tinea tonsurans*, the skin is darker than natural, having a greyish tinge; the surface, which is scurfy, has a "goose-skin" appearance; the hairs are not absent, but merely broken off close to the skin.

In *tinea favosa*, the presence of small, yellow, cup-shaped incrustations, or of the larger, white, powdery crusts; and the inflamed condition of the skin itself, will usually suffice to avoid error.

In *senile* and *sypilitic alopecia*, the baldness is diffused, not circumscribed; there is a general thinning of the hair, and no formation of circumscribed bald patches; the same remarks apply to the baldness produced by pregnancy, or by acute general disease.

The bald patches which are caused by cicatrices, resulting whether from injury or disease, may be distinguished by the cicatricial character of the integument, and by the history of the case.

TREATMENT.—The administration of arsenic internally has been recommended in this disease; but the author's experience of it is not at all such as to induce him to recommend it here as of any, even the slightest, use. By many the effect of steel has been praised; but although of unquestionable service in the temporary baldness following on acute general disease, it is quite incompetent *per se* to arrest the progress of *Tinea decalvans*, and it is doubtful whether its employment is of any advantage. Thus much, at all events, may be said, that the usual indication for steel, viz. pallor, is as often absent as present in this affection.

The local applications that are in good repute for the healing of the bald patches are:—

Ointment of tar (3ij to the oz.), the unguentum cantharidis, the unguentum creasoti, ointment of the huile de cade

(3j to the oz.), the linimentum crinale (which is composed of cantharadine gr. j, rectified spirit ʒiij, and castor-oil ʒj), the cantharadine tissue or the capsicum tissue (sold under the name of 'sinapine' tissue), alcoholic solutions of the various essential oils, in the proportion of ʒss of the oil to ʒj of the rectified spirit, ointment of the sulphur præcipitatum (3ij to the oz.), the unguentum hydrargyri mitius of the Dublin Pharmacopœia, the unguentum hydrargyri iodidi rubri diluted with three times its bulk of simple ointment, an ointment of turbith-mineral (gr. xv to the oz.), an aqueous solution of corrosive sublimate (gr. ij to the oz.), and others.

All that have been mentioned, it will be observed, are either "parasiticide" or "stimulant," while many of them possess both of these properties. There is no doubt but that stimulation is an essential part of the process of cure, and, according to the author's experience, it is better that the stimulation should be slight and continuous than violent and intermitting.

Respecting the prognosis of *Tinea decalvans*, it may be stated, that in the *nummulated* variety, it is generally favourable as regards the prospect of ultimate recovery, although, if the disease be of long standing, a period of several months may sometimes be required to restore the hair to its original condition. In the *serpiginous* variety, the prognosis will be doubtful; indeed, the author has met with cases in which, notwithstanding that the patient had had from the first the advantage of eminent advice, complete and permanent baldness had ensued. In either variety, the probability of speedy recovery will be less in proportion to the previous duration of the disease, the size of the patches, the fineness and scantiness of the cottony filaments, and the atrophy of the scalp.

SECTION IV.—SYCOSIS.

SYCOSIS (or Mentagra, or the Chin-welk), a disease which is caused by the *Microsporon mentagrophytes*,* is in this country an extremely rare complaint.

It is not generally supposed to be so very rare, since impetigo sycosiformis (*vide* p. 67), a disease that is of frequent occurrence over here (but which has no connection beyond that of a common situation with Sycosis) is very often mistaken for it, and so the impression prevails that Sycosis is not a very uncommon disorder. It is, however, as rare, if not even rarer, than favus is in this country. On the Continent, however, it is by no means rare.

The eruption is confined to the hair-covered portions of the face. It is consequently only met with in adult males, or (very rarely) in such adult females as are provided with more or less of a beard. It exhibits a special predilection for the *chin*; whence its names, Mentagra and Chin-welk.

The disease commences with a sensation of heat, and tingling of the affected surface, which soon becomes reddened, scurfy, tender, and somewhat swollen.

Soon pustules and tubercles of a peculiar kind are developed on the inflamed patch.

The pustules are very large, and are purulent only at their summits; the indurated, acuminate base, which may attain the size of a nut, forming the greater part of the pustule. The pustules are sometimes isolated, but are generally arranged in clusters.

* According to some authorities, the parasite that produces Sycosis is the same that causes tinea tonsurans, viz. the *trichophyton tonsurans*; and it is affirmed that an adult male, affected with Sycosis, may be the cause of the development of tinea tonsurans on the head of a child, and *vice versa*. But this is very doubtful, and there are many reasons for believing that Sycosis is the result of a distinct parasite.

The tubercles, which may attain a size equal to that of the pustules, occur in circumscribed groups, those of the same group running into one another, and forming a raised nodulated patch. The surface of this patch soon becomes excoriated, and secretes a muco-purulent fluid, which concretes into a thin dirty-grey scab. On detaching and removing this scab, a moist, glistening, coarsely-nodulated, red surface is disclosed, looking something like the inner part of a green fig (hence the name Sycosis). The surface of a ripe mulberry is, perhaps, a better simile.

These circumscribed, raised, nodulated, moist, scab-covered patches (*fungous ulcers*, as they are sometimes called), occurring about the chin, are very distinctive of the disease.

The pustules, or the tubercles, attain their full development within the space of ten days or a fortnight.

As might be supposed, so much acute inflammatory swelling of the chin is attended with considerable discomfort, and produces enlargement, and sometimes suppuration of the submaxillary glands.

The hair of the affected surface soon becomes loosened, and falls, or is only maintained *in situ* by its roots becoming entangled in the crusts. When the crust is removed, nearly all the hairs that it has entangled come with it.

The cause of the disease is the growth of the *Microsporon mentagrophytes* in the root-sheaths of the hair of the face. The irritation occasioned by the presence of this parasite, which extends down the hair-follicles through the thickness of the cutis into the superficial part of the subcutaneous fat, causes the nodular swellings, the large-based pustules, and the subcutaneous infiltration, which are characteristic of the disease. The exciting cause, then, of Sycosis is contagion, and its predisposing causes are—adult or advanced age, and the masculine sex.

If submitted to suitable treatment, Sycosis may be recovered from; but if left to itself, it is likely, after a long continuance, to end in permanent baldness.

Sycosis may be mistaken for impetigo sycosiformis, for a vegetative or a tubercular syphilide, or for epithelial cancer.

Sycosiform impetigo, however, is a more superficial eruption. Its pustules are never so large, nor are they ever accompanied with so much infiltration of the skin and cellular tissue, as those of Sycosis. It presents, so to speak, much less of a malignant appearance than Sycosis. There are no 'fungoid ulcerations' in sycosiform impetigo. It exhibits no special predilection for the chin; on the contrary, it is commoner on the upper lip than elsewhere, and is very often limited to the hairy parts of the cheeks. On detaching the crusts of sycosiform impetigo, the entangled hairs do not come away with the crusts, but remain firmly attached to the inflamed skin; nor is any notable baldness of the affected surface produced by the eruption, unless the disease be of very long (several years') standing. Sycosis is contagious; impetigo not so. A microscopic examination of the hair growing from the inflamed skin may, in cases of doubt, be called in to aid the diagnosis. In arriving at a decision, it should always be remembered that in England the odds are infinitely against the probability of any case of skin-disease chancing to be Sycosis.

The diagnosis of impetigo of the hairy part of the face from Sycosis is of some importance, since epilation is not uncommonly practised as a *dernier ressort* in obstinate cases of sycosiform impetigo, in consequence of that disease being confused in the mind of the epilator with Sycosis. Now, although a comparatively painless and a most advantageous proceeding in cases of Sycosis, epilation is mere torture in cases of sycosiform impetigo. The hairs are firmly attached to the tender, inflamed skin, and their evulsion is productive of no other effect on the disease than a temporary aggravation of it.

Acne (indurata) may be readily distinguished from Sycosis by its not being confined to the hairy part of the face, by its tubercles being of much slower growth, by their con-

taining a sebaceous core, and by the absence of fungous ulcers.

The *flat vegetative syphilide*, or 'mucous tubercule,' is apt to be mistaken for Sycosis, because it is not uncommonly developed in the neighbourhood of the mouth, and presents a raised, raw surface, covered with a crust. But the surface of the mucous tubercule is paler, and is much smoother than that of the ruddy, coarsely-nodulated, fungous ulcer of Sycosis. Its margin often overlaps the constricted base—a condition never present in Sycosis. It is commoner at the angles of the mouth and on the cheeks than on the chin.

The *tubercular syphilide* (the clustered, non-ulcerating variety of which may be thought to have some resemblance to Sycosis) is far more slowly developed. Its tubercles either do not form a raw surface, but become gradually reabsorbed without breach of surface; or, if a raw surface be formed, the crusts covering it are thick and dark-coloured, and conceal (not a reddened, nodulated, fungous surface, but) abruptly-limited, sunken ulcers, with flat, ash-grey floors. The tubercular syphilide is always accompanied by other symptoms of constitutional syphilis.

Epithelial cancer is a disease of far slower progress than Sycosis. It presents, it is true, like Sycosis, an elevated, raw surface; but the circumferential is decidedly more elevated than the central part, and the surface is lobulated rather than nodular. The disease, when it occurs in the neighbourhood of the chin, affects usually the edge of the lower lip.

TREATMENT.—The treatment of Sycosis is to be conducted on the same principles as that of *Tinea favosa*.

SECTION V.—CHLOASMA.

CHLOASMA, (or, as it is often called, *Pityriasis versicolor*,) a disease which is caused by the *Microsporon furfur*, presents the appearance of variously-shaped stains of the skin,

which may be of a yellow, a brown, a reddish, a grey, or even a black colour. These discoloured patches may be small, rounded, and distinct from one another, or larger and coalesced, so as to form fantastic patterns, the outlines of which, although sinuous and irregular, are usually well defined. In other cases, one large uniform patch may cover nearly half the body. The surface of the patches is slightly raised above the level of the skin, and exhibits a mealy desquamation. This scurfiness, though it is much less conspicuous than that of pityriasis proper, is important as a means of diagnosis. According to the author's observation, it is always most perceptible at the margin of the disease. When not evident over the general surface of a patch, it may be rendered so by scraping the skin lightly with the back of a penknife. On detaching the diseased epidermis, the skin beneath is seen to be *reddened* as well as swollen. The epidermis itself is yellow. The disease commences as small scattered spots of about the size of a pin's head; these slowly spread till they meet and coalesce with one another.

The eruption is seen most frequently on the anterior surface of the neck and of the upper part of the chest, and on the upper part of the back and of the arms. It is common, too, on the pubic region, and the inner half of either groin. The author has remarked that it rarely affects the hollow of the axilla, or the lateral surfaces of the chest or abdomen, even when most extensively spread over the anterior and posterior surfaces of the trunk.

Chloasma is more commonly a disease of adult age. It is seen often in the phthisical. It follows a chronic course. It depends essentially on the presence of the *Microsporon furfur* in the substance of the epidermis. If a portion of the epidermis, scraped off from the diseased surface, be moistened with dilute acetic acid or a solution of potash, and placed under the microscope, the cryptogam will be seen to consist of (*a*) clusters of cells (the sporules) and (*b*) ramified tubules (the mycelium). The various hues of different

patches of Chloasma in the same individual, depend on the varying quantity in which the *Microsporon furfur* is present at different parts of the surface. The itching that attends Chloasma is usually slight, but it is occasionally severe.

Chloasma is apt to occur in pregnant women, disappearing often shortly after delivery: singularly enough, in such cases the face is the favourite locality of the disease. This "*Chloasma gravidarum*" must be distinguished from the *ephelis* of the pregnant, which it much resembles in general aspect, but which is produced by an alteration in the pigmentary matter of the epidermis, and is attended neither with itching nor with desquamation.

Chloasma scarcely ever happens to children. Tuberculosis appears to favour its development. It has been supposed that the wearing of flannel is a cause of the disease: the chief argument in support of this theory, is the fact that the eruption ordinarily is limited to the parts usually covered by a flannel under-garment, viz. to the trunk and the upper parts of the arms and thighs. But if flannel be the cause, "how then," it might be asked, "is the *Chloasma gravidarum* (which affects the face) to be accounted for?" The author has often met with Chloasma occurring in persons who do not wear flannel underclothing, and in them the disease has been as strictly confined to its usual situations as it is in those who wear flannel all the year round.

If untreated, the disease continues indefinitely, but it yields readily to suitable treatment. It is, however, very apt to return after a time. When it occurs in pregnant females, it may be expected to disappear shortly after delivery.

Chloasma is liable to be mistaken for *ephelis*, for *pityriasis*, or for *vitiligo*. In no other eruption, however, are the characteristic spores and mycelium of the *Microsporon furfur* to be found in the epidermis.

In *ephelis*, there is no itching and no scurfiness.

In *pityriasis*, although there are both itching and scurfiness, the scales are white.

In *vittiligo*, the lighter patches enclosed by the darker stains are unnaturally white, whereas, in Chloasma, they are of the natural colour. There is no scurfiness in *vittiligo*.

TREATMENT.—Lotions of sulphurous acid are recommended in the treatment of this disease, but sulphurous acid is far too volatile an agent to be of much use when exhibited in this shape. Lotions of acetic acid are of service; they soften and detach the diseased epidermis, and remove with it the parasite. Weak lotions of caustic potash, or strong solutions of the subcarbonate of potash, have a similar effect. Dilute lotions or, still better, weak baths of corrosive sublimate are very efficient remedies; so are sulphur-baths.

A very efficacious mode of treatment is the following:—The patient first thoroughly soaps the affected skin. After this he takes a warm bath, and as soon as he has dried himself scrubs the discoloured surface with a flesh-brush; he then rubs well in over every patch of the disease a weak mercurial ointment. The process is repeated every second day.

This plan, which the author has employed pretty extensively, has the following advantages. By the first operation all the semi-detached scurf, and with it much of the parasite, is removed; by the second, the remaining epidermis is thoroughly softened, so that by the third step the more superficial portion of it, with the parasitic matter contained therein, is readily detached, and thus the more deeply-seated portions of the fungus are laid bare to the immediate contact of the remedy. By this process, patches that have existed for many years may be removed completely in about a week's time.

An ointment of sublimed sulphur has been recommended, but the precipitated sulphur is a much more active remedy than the sublimed sulphur. If sulphur-ointment be used, its efficacy will be much enhanced by the addition of a small quantity of the hepar sulphuris.



INDEX.

	PAGE		PAGE
ACARIAN Furrow	153	Bullæ	71
Acarus folliculorum	139	Bullous eruptions	71
Acarus Scabiei	153	syphilide	121
a cause of Ecthyma	65	CAULIFLOWER Excrescence	110
a cause of Eczema	51	Cheloid	87
Achorion Schönleini	168	cicatricial	87
Acne	136	spontaneous	87
its causation	144	Chilblain, the	8
its diagnosis	145	Chin-welk, the	183
its treatment	146	Chloasma	186
albida	140	gravidarum	188
cerea	140	Chronic Ecthyma	64
cornea	141	Eczema	47
erythematosa	138	Pemphigus	71
hypertrophica	138	Urticaria	16
indurata	137	Circumscribed Prurigo	42
juvenilis	137	Classification of the diseases	
— molluscum	141	of the skin	1
oleosa	140	Condyloma	110
punctata	139	Corona Veneris	125
rosacea	138	Crab-louse eruption	162
simplex	136		
syphilitica	117	DIFFUSED Prurigo	40
Acute Ecthyma	63	Dry itch, the	32
Eczema	47	Dyspeptic Erythema	11
Pemphigus	71		
Urticaria	15	ECTHYMA	63
Addison's disease	103	cachecticum	64
Animal-parasite diseases ..	151	infantile	64
Author's classification of		syphilitic	119
the diseases of the skin ..	3	vulgare	64
		Eczema	47
BEDSORE, the	8	a cause of deafness.	50
Body-louse eruption	158	a cause of ophthalmia ..	50
Broken Chilblains	9		

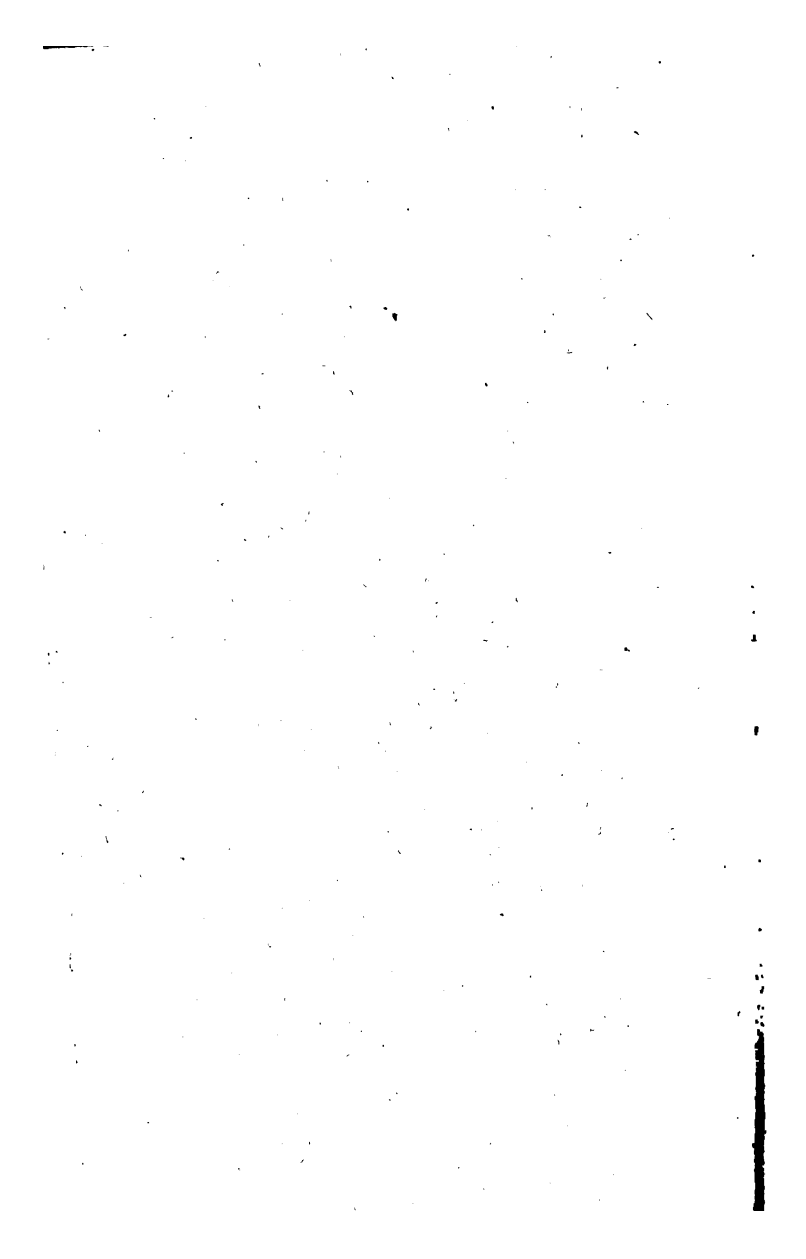
	PAGE		PAGE
Eczema manuum	49	Ichthyosis serpentina	30
of the scalp	50	Impetigo	67
rubrum	48	figurata	67
simplex	47	granulata	67
English Leprosy	19	larvalis	67
Ephelis	96	occipital and sincipital, 68, 160	
Epilation	169, 175	scabida	68
Erythema	5	sparsa	67
circinatum	10	sycosiformis	67
fugax	11	syphilitica	118
intertrigo	7	Intercurrent Roseola	12
leve	7	Urticaria	16
nodosum	9	Itch, the	151
papulatum	10	the dry	32
paratrimma	8		
pernio	8	KELOID	87
purifluens	7	cicatricial	87
simplex	6	spontaneous	87
tuberculatum	10		
Erythematous Lupus	79	LENTIGO	95
Exanthemata	5	Lepa vulgaris	20
Exanthematous Syphilide. 110		Leprosy, the English	19
		Leucoderma	100
FALSE Measles	13	Lichen	32
Favus	165	agrius	34
lupinosus	165	circumscriptus	34
scutulatus	166	gyratus	35
squarrosus	166	inveteratus	34
Fish-skin disease	29	lividus	35
Foliaceous Pemphigus	73	pilaris	35
Freckle. <i>See</i> Lentigo	95	planus	34
		simplex	33
GENERAL Prurigo	40	tropicus	35
		urticatus	35
HEAD-LOUSE eruption	159	Local erythema	6
Herpes	56	Louse-disease	158
circinatus	170	Lupus	78
gangrenosus	57	erythematous	79
labialis	58	exedens	80
phlyctænodes	58	hypertrophicus	79
præputialis	59	pustular	79
tonsurans	171	tubercular	79
zoster	56	warty	80
Honeycomb-ringworm	165		
		MACULÆ	92
ICHTHYOSIS	29	Macular diseases	92
cornea	30	Measles, false	13
nitida	30	Mentagra	183

	PAGE		PAGE
Microsporon Audouini	178	Prurigo	40
furfur	187	formicans	40
mentagrophytes	184	mitis	40
Moles	92	podicis	42
Mouse-mark	93	pubis	41, 162
Mucous patch	108	pudendi muliebris	42
tubercule	108	senilis	41, 158
		scroti	42
NÆVUS	92	Psoriasis	19
araneus	93	circinata	20
pigmentary	92	diffusa	20
vascular	93	guttata	20
Nettle-fever	15	gyrata	20
rash	14	palmaris	20
		plantaris	21
OCCIPITAL and sincipital		unguium	21
Impetigo	68	Pustulæ	63
		Pustular eruptions	63
PAPULÆ	32	lupus	79
Papular eruptions	32	syphilides	117
Papular syphilide	115		
Parasitic eruptions	151	RASHES	5
Patch, mucous	108	Rheumatic erythema	9
Pediculus capitis	159	Ringworm, honeycomb ...	165
corporis	158	scurfy	170
a cause of urticaria ..	16	smooth	177
pubis	161	Roseola	11
Pemphigus	71	æstiva	12
acute	71	infantilis	12
acute general	72	syphilitica	110
chronic	73	vaccinia	12
foliaceous	73	variola	12
neonatorum	72	Rose-rash. See Roseola ..	11
pruriginous	74	Rupia	75
solitarius	71	escharotica	76
Phthiriasis	158	prominens	75
Piebald negro	101	simplex	75
Pigmentary nævus	92	syphilitica	121
Pimple eruptions	32		
Pityriasis	25	SCABIES	151
alba	26	eczematous	152
fusca	26	furuncular	152
pilaris	27	impetiginous ..	152
rubra	26	papular	151
versicolor	186	pustular	152
Pomphi	14	urticarious	152
Port-wine mark	93	vesicular	152
Pruriginous pemphigus ..	74	Scaly eruptions	19

	PAGE		PM
Scurfy ringworm	170	TINEA decalvans	11
Sebaceous diseases	136	favosa	11
Shingles, the. <i>See</i> Herpes		tonsurans	12
zoster	56	Toad-mark	9
Skin-maggots	139	Tooth-rash, the	9
Smooth ringworm	177	Trichophyton tonsurans ..	12
Spider-mark	93	Tubercula	7
Spili	92	Tubercular eruptions ..	7
Squamæ	19	lupus	7
Squamous syphilides	113	syphilide	12
Strophulus	37	Tubercules, mucous	10
albidus	38, 140		
candidus	38	URTICARIA	1
confertus	38	ab ingestis	1
intinctus	38	conferta	1
volaticus	38	febrilis	1
Sycosis	183	gyrata	1
Syphilida	104	tuberosa	1
Syphilides	104		
treatment of the	130	VACCINIA, a cause of roseola	1
bullous	121	Varicose eczema	5
exanthematous	110	Variola, a cause of roseola.	1
horny	114	Varus comedo	13
papular	115	Vascular nævus	8
pustular	117	Vegetable-parasite diseases	16
squamous	113	Vegetative syphilides	10
tubercular	123	Verruca	8
vegetative	108	digitata	8
vesicular	112	Vesiculæ	4
Syphilitic acne	117	Vesicular eruptions	4
ecthyma	119	Vesicular syphilides	11
eczema	112	Vitiligo	10
eruptions	104		
herpes	112	WARTS	8
impetigo	118	syphilitic	11
lichen	116	Warty lupus	8
lupus	123	Wheals	1
psoriasis	114	Willan's classification	
roseola	110		
rupia	121	ZONA	5
varicella	113		
warts	110		

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
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